

THE REPRESENTATION OF EFFECTIVENESS IN MANAGEMENT :
AN INVESTIGATION INTO
KNOWLEDGE, MEANING, AND DISCOURSE.

by

COURTNEY STUART HANNABUSS
MA MEd MLitt FLA ACIS
The Robert Gordon Institute of Technology

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PART 4

CHAPTER 11

ABSTRACT

This chapter argues that story holds a central place in culture and in management. Storytelling is discussed as a way of representing action in the context of time. Annalistic and scriptal aspects of storytelling are considered. It is argued that scripts can be developed into stories and that such stories are composed not only of major substantive elements but also of many ancillary ones, in particular the storyteller's own commentary.

A model is developed for managerial storytelling in which what managers regard as plausible, and what actually happens to them, form the basis of one of a number of important dimensions to storytelling, the EXPERIENTIAL dimension. It is suggested that managers use storytelling as a way of trying to understand experiential successes and failures, and draw 'lessons' from the process. This 'lessoning' role of stories is associated with the value such storytelling appears to have. This is called the AXIOLOGICAL dimension to storytelling because of its basis in values and beliefs.

Many acts of storytelling treat experience and lessons retrospectively, and in relation to what they think should happen or should have happened. This forms the third dimension of storytelling, the DEONTIC dimension.

All three dimensions operate on and within stories. Storying as an activity incorporates not only storytelling but evaluation, decision making and reflection. There is also an element of 'provisionality' in storytelling, associated with what Vaihinger called 'as if'.

The EXPERIENTIAL-AXIOLOGICAL-DEONTIC (EAD) model is developed and applied with reference to various kinds of manager. Reference is made to organisational and personal approaches, and axiomatic and impressionistic knowledge. These are discussed with reference to Jungian ideas about styles of thinking introduced earlier in the thesis (in chapter 4).

The model is applied to craftsman and gamesman managers, and suggests that such managers perform differently in terms of rigidity and adaptiveness. These ideas are set in the context of organisational culture.

Means and ends, and truth in storytelling are discussed. It is suggested that TELEOLOGY forms the basis of the fourth dimension of storytelling, on the ground that things bring about certain goals, and understanding actions this way makes them intelligible.

Teleological approaches are applied with action mazes and the EAD model of storytelling,, retrospective and prospective (ie working in time). The addition of the teleology converts the EAD model into the ETAD model (ie the EAD model incorporating the teleological dimension). This is discussed with reference to means-ends analysis and goal setting and recognition. These ideas are applied to craftsman and gamesman manager storytellings.

There is a final suggestion that the EPISTEMIC dimension, by which managers know (or believe they know) that things are true, or by which they can or seek to be able to justify their actions, forms a fifth dimension of storytelling, enhancing the model to the ETAD model, and pointing to a discussion of the context and implications in Chapter 12.

CHAPTER 11

MANAGERIAL STORYING : SEMIO-NARRATIVE AND

GOAL-BASED ANALYSIS

SECTION 1 : SEMIO-NARRATIVE ANALYSIS

The place of story in culture

Storytellers hold a special place in the history of mankind. We know this from the heroic age, from Homer to Beowulf, where tales of warriors and monsters and gigantic struggles were celebrated in oral and then written tradition. Such storytelling was not only for entertainment: it was a way of passing on knowledge and wisdom, perpetuating traditions and ethnic identity, values and religious attitudes. For Mario Vargas Llosa's (Llosa, 1989) South American aboriginal natives, the storytellers or 'habladores' played this role:

'... Messengers who went from one settlement to another in the vast territory over which the Machiguengas were dispersed, relating to some what the others were doing, keeping them informed of the happenings, the fortunes and misfortunes of the brothers whom they saw very rarely or not at all. Their name defined them. They spoke. Their mouths were the connecting links of this society that the fight for survival had forced to split up and scatter to the four winds... [The hablador] not only brings current news but also speaks of the past. He is probably also the memory of the community...

... I was deeply moved by the thought of that being, those beings... bringing stories from one group of Machiguengas to another and taking away others, reminding each member of the tribe that the others were alive, that despite the great distances that separated them, they still formed a community, shared a tradition and beliefs, ancestors, misfortunes and joys : the fleeting, perhaps legendary figures of those habladores who - by occupation, out of necessity, to satisfy a human whim - using the simplest, most time-hallowed of expedients, the telling of stories, were the living sap that circulated and made the Machiguengas into a society, a people of interconnected and interdependent beings.'

Important here is the way in which stories are accepted as a natural way of representing human knowledge. More than that, they are seen as a natural way of representing values and attitudes as well as knowledge. Together they might be seen as wisdom. Further, storying (ie representing fact and fiction in story forms) is seen as a way of representing the wisdom of a group, here a tribe dispersed geographically, an idea easy for transfer to ethnic or cultural or professional groups elsewhere and at other times. There is a suggestion that the coherence of the group is dependent on the coherence of its wisdom.

The act or tradition of storytelling draws on particular skills (of what to include in the stories, of how to structure the stories, of what to expect in the audience [ie it is an inter-subjective activity]), which readily takes us into narrative analysis. Comparative studies of story (Kumar, 1989) suggest that there are generic patterns in terms of acts, agents and settings. Finally, through the discourse form of story, coherence is shaped, the group derives and supplies its sense of coherence from such shapes, and this is a conscious and self-conscious process: the awareness is a reflexive act, since storying is a deliberate construction of meaning, a meta-cognitive search for meaningfulness.

These themes allow us to highlight those characteristics which are common to storytelling through the ages AND those which have a close bearing on the process of managerial storying. To take up the theme of knowledge (ie organised information, which itself is retrieved and 'noticed' data), we may argue for the existence of widely held or agreed views of what is so and what 'makes up' known knowledge. This may be held generally (eg what people in general know about the structure of the British constitution) or specifically (eg what informed teachers regard as worth knowing if they are to carry out tests on seven-year-olds).

Such knowledge is often powerful or hegemonistic in the sense that people showing a lack of it may be made into outsiders (eg knowledge of particular content or procedures may prevent an article being published in a learned journal). This is the familiar paradigm at work (see chapters 1 and 2) with its influence on knowledge representation, both substantive and procedural. Implicit is the notion that some kinds of knowledge are 'true' and others 'false' (or less true, or transitionally true, or in Popper's sense testably true). The extent to which managerial knowledge can be embodied in stories is explored below.

Knowledge systems are legitimated within a culture by a complex pattern of social, economic, political, and psychological factors. For instance, bourgeois values in Britain have (Inglis, 1985) had a profound effect on the educational system (eg its emphasis on the development of the individual, its respect for hard work and self-discipline). When values are structured this way, we may extend the term 'paradigm', which is knowledge-based, to the term 'ideology', which incorporates both values and attitudes as well as knowledge and information. (Chapter 3 looks at ideologies more fully).

Certainly, ideologies structure values, taking in class structures, political preferences, and ideals about freedom and justice. Implicit here, too, is the notion of what is 'true', made complex by its valuational context and so often rendered as 'fair' or 'good'. For both paradigms and ideologies, the epistemic is an important part of their working and our response to and interpretation of it.

It is easy to move from here to suggest that both paradigms and ideologies, however else they can be represented and used, can take the form of stories. When stories are told by palaeontologists about how wings evolved through geological time, or by managers about what appropriate measures should be taken under the Health and Safety at Work Act, paradigmatic knowledge is being utilised, and implicitly substantive and procedural parameters are being imposed on the discourse to make it clear and give it authority.

Similarly, when stories are told by social workers about the fair treatment of young children whose parents are accused of satanic abuse, or by managers about the fair treatment of a member of staff suffering from stress, ideological wisdom is being utilised, and substantive and procedural parameters are being imposed for identical reasons.

These are stories that we tell ourselves, as Geertz (Geertz, 1983) states, for we are not merely creators and tellers of the stories, but we form our own audience. This is true in two senses: first, storytellers tell stories to others (known as audience or interlocutors), and second, storytellers are their *own* audience, since all storytellers listen to their own stories and reveal two personae (teller and told) when doing so. We form characters in our own stories, just as much as we form the tellers and hearers for the stories.

Storytelling, then, is an activity which a group carries out self-consciously, reinforcing the importance of the phenomenological approach to narrative and the notion that reality is a socially constructed meaning.

Important here is the meaning of key sociological concepts, 'key' in the sense that scholars at work (say, in fields like sociology, economics and history) may use them widely and argue about and extend their meaning (see Hannabuss, 1988a, on collaborative meanings) both on their 'surface' level and on deeper 'archaeological' levels: the work of Foucault (Foucault, 1966; Hannabuss, 1990) and others (Outhwaite, 1983; DiRenzo, 1966), as discussed in Chapter 8.

It is then possible to suggest that culture might be regarded as a collection of discourses, since culture is so often embodied in discourse (Petrey, 1990). Major forms of discourse are conversation and story. Here we shall consider story, although conversation (about and using story) has been the major ethnographic procedure by which research information has been elicited.

Narrative, action, and time

Bennett (Bennett, 1990) argues that ideologies (which he calls 'frames of meaning') can be *represented* in story forms of the period, and that this is a characteristic semantic phenomenon (rather like speech forms representing the meanings of speakers). The detective story is often cited (Glover, 1973) as illustrating this well, for it emblematises the city landscape and its dangers (eg in the works of Raymond Chandler), and treats crime as a correctable deviancy from a moral norm.

Both these features are paradigmatic and ideological, and the stories which arise may be seen, in Llosa's terms, as both entertainments and ways of reflecting and refracting cultural wisdom and representing epistemic coherence. Porter (Porter, 1981) argues that a Sherlock Holmes story operates on two levels, that of story (ie suspense, drama, action, resolution), and that of ideology (ie the way in which such stories 'embody an ideology of scientific rationalism' in Holmes's methods of detection).

Experience can be represented through story forms, yet this does not imply that these forms are exclusively literary. It is possible to find storytelling or narrative conventions in scientific discourse. Harre (Nash, 1990, 81-101) argues that scientific discourse, with its reputation for strict objectivity or factuality (ie dealing in known truths), uses an individual rhetoric : eg the illocutionary statement 'We know...' (implying 'Take this on trust when I say that...') argues for the existence of a facticity (truths presented as *if* they were known truths) which in turn suggests that rival viewpoints are continually being put forward.

Harre continues by suggesting that the neatness of the published scientific paper disguises the empirical disorder and 'going back and forth' of actual scientific research: '... apart from its empirical falsity as a description of events, is that it is a "smiling face" presentation...To achieve the story line, events as experienced within the framework of common sense must be edited'. Epistemic assessments of truth and falsity are included, for instance, when writers allege that the results of other writers may be accepted only with caution. In this way, valuational or ideological factors work pervasively in such scientific 'stories'. Respectively, McCloskey and Jackson (Nash, 1990) argue persuasively about economics and law having similar qualities.

If we can detect storying in forms of intellectual discourse of many kinds, it suggests that storying is an activity, a way of representing knowledge, to which many people turn even when not consciously setting out to tell stories in any literary or narrative sense. Interesting questions follow from this. One of these is the extent to which action and any account of action are connected. This issue lies at the heart of what Harre said about scientific research and the way in which scientific papers represent it.

It also lies at the heart of writing history. Seen in the largest sense, writing history is not exclusively an activity of historians (eg Anglo-Saxon Britain, the Franco-Prussian War, Africa and Imperialism), but a general process of trying to make sense of events as they happen and happened. It is a method of explanation and inference.

It is possible to characterise explanation as a process in which people try to find reasons or causes for things. Nagel (Nagel, 1961), using a scientific nomothetic-deductive (or law-centred) model, stresses deduction, probability, and teleology (that things bring about certain goals, and that understanding

actions this way makes them intelligible). He wants to establish epistemic and logical connections, but acknowledges that theories have a cognitive status also 'in which credence is given and loyalties shown to different intellectual traditions and to ways in which language is assigned to accommodate the facts'. The teleological approach will be examined further below when goal-based stories are discussed. Here it is useful to emphasise that explanation cannot fulfil all our needs in finding a connection between narrative and action. What is missing is 'understanding'.

Understanding concentrates on what justifies actions, in general or in the eyes of an agent. Traditionally, historians work at understanding the causes of, say, revolutions or social change (eg Hobsbawm, 1962). Such understanding subsumes explanation and, with its emphasis on interpretation and evaluation, reveals reflecting and reflexive elements in attempts to connect narrative with action. Such understanding combines paradigmatic and ideological knowledge. Elton (Elton, 1967) rightly suggests that narrative is used by historians (a) to describe a situation, (b) to analyse a historical process, and (c) to tell a story.

Many of the forms used and examined by historians are stories in their own right - chronicles, annals, diaries, sagas, novels, journalism - partly by reason of their describing events that happened, revealing how people felt living through them, and partly because many acknowledge a chronological or temporal sequencing effect, which uses simple or complex causalities for their narrative texture and as a way of underlining logical and epistemic validity.

White (White in Mitchell, 1981, 1-23), talking about narrative, suggests that a crucial skill for both historian and reader is 'the capacity to envision a set of events belonging to the same order of meaning'. This is termed a

'configurational skill' (Ricoeur quoting Hayden White, Ricoeur, 1984) by means of which constructing or inferring the 'plot' involves a construal of significant wholes out of scattered events. This idea of importance is important when (below) we consider managerial stories, and (further below) when we examine the reflexivity of hermeneutic circles (Riceour, in Reagan & Stewart) by which we reflect upon our own stories and come to understand both them and the actions which they represent, which we want them to represent, or which we believe they represent.

The connection between narrative and action (or history) has been an active area of debate for over three decades. White (White, 1984), following Elton, suggests that the various roles of history make the roles of narrative vary too. The difference between history and fiction lies in 'content' rather than 'form', history being (in the main) real events, 'events that really happened, rather than imaginary events... invented by the narrator'. When the narrative resembles the events of which it is a representation, then it can be taken as a 'true account'.

The debate itself represents an interesting example of paradigmatic upheaval, particularly as positivistic approaches (eg Hempel) argued for objectivity only if story was discarded, and others (eg Dray) that modes of explanation (eg discovering facts, inquiry) were enough. Ricoeur stresses how close actions and narratives are, particularly in terms of how we interpret them: hermeneutically, he argues, 'the reading of an action... resembles the reading of a text' (White, 1984, 26), a link expressed by Bruner as one between 'the landscape of action' and 'the landscape of consciousness'.

This connection between action and narrative is in a sense the link between the self and any coherence made out of life itself. Carr (Carr, 1986a; Carr, 1986b)

believes that narrative structure is the organising principle of our experiences and actions 'and of the self who experiences and acts'. When we know someone's life-story, we think that we know them. At death, we have an experiential whole. In autobiography, we try to impose coherence on our own life, in biography, on that of others.

Carr cites Dilthey's view that this is 'a cognitive endeavour associated with coherence', containing value, purpose, and meaning. Working within time, the storyteller uses narrative coherence 'to give a sense of ending'. With and within our sense of story, we can make sense of the many actions and events, and fit them with our plans and expectations.

Carr emphasises the temporal character of everyday experiences, saying that this is what makes it look like narrative. Within the temporal frame, 'that field of occurrence', the present stands out, and we are there trying to make sense of our 'horizon of consciousness'. We perceive duration when it is organised, and the organisation is more than a causal linkage : it is an intentional linkage. We know that past, present and future determine each other as parts of the whole, yet our knowledge consists of more : we know that our intentionalities have affected and will affect things, and we know that we are working to understand (not just explain) the entailments.

We look backward, and we look forward (a process called *protention*, ie our openness to future events). With the wisdom of hindsight, we can narrate events after the event easily, because by then we have been able to make sense of them. By that token, much storytelling is RETROSPECTIVE (Weick, 1969).

Even when we feel that experience and narrative are separate, we know that narrative has a sense-of-the-whole-making or configurational role to play, and

we know that we are narrating the story itself. Storytelling itself does not step outside the temporality which it describes and confirms. The configurational effect of storytelling enables us to make sense of actions, sub-actions, and states, and 'provide them with a closure'.

Moreover, stories are told TO and BY : there is a storyteller and an audience, and we can be BOTH. When we are, we reveal the key skills of the reflexive practitioner. Such storying can be exteriorised, either by ourselves or by researchers, with the effect of revealing the sense of coherence we have of the events and states. In this way, we can represent the knowledge (paradigmatic and ideological) which people have, or think they have.

Managerial storying: annalistic features

Management is an activity or a process regarded as done rather than thought about. But in fact the thinking about doing, beforehand (protentively, in Carr's word) and afterwards (drawing on Weick's retrospective hindsight), is very important. So is the continual inter-penetration of praxis and theoria in management, by which practitioner action and managerial theory are regarded by many as important mutual complements. These two factors, of thinking and acting, and theory and practice, lead us in the direction of thinking that in management thinking is essential. As other chapters have stressed, the meaning of management is the management of meaning, and effective management depends upon effective knowledge about the thinking and learning which take place in management.

For most managers, the representation of their day - the diary, the logbook, the thoughtful mental review - can be seen as an ANNAL. What characterises an annal is that it lists events chronologically but has no narrative element. It exists within a continuous present, breaking off and starting up again. Annals do not tell stories explicitly. It is essential to get the manager to describe what he is doing, to explicate the annal, to organise the information by theme or in some other coherent way (eg that project X carries over the next six weeks, that tomorrow Jones will be interviewed as part of an ongoing appraisal programme in the department, that at the end of next week the regular requests for the budget will be due).

In this way, based on the simple annalistic textuality, supplemented by the manager's commentary, a CHRONICLE is built up. Chronicles are more elaborate and ambitious than annals, organised by topics and themes, more comprehensive in terms of detail and narrative coherence. Chronicles also take greater account of temporal sequencing, suggesting or implying reasons why things happen as they do, aware of the writer's yesterdays and tomorrows (White, in Mitchell, 1-23), but essentially based on 'plot elements' which give the account its meaning. Some of the commentary supplied by the manager extraneously to the annal is likely to be included in the text of the chronicle, but it is not fully shaped as narrative.

White suggests a hierarchy from annal to chronicle to history, in the last of which a mere chronological sequence is superseded by an attempt to represent 'real' events with 'the coherence, integrity, fullness, and closure' of fully shaped narrative, with a beginning, middle and end, and room for a distinct and independent artistic and moral (in the Leavisite sense) position for the historian. Characteristic of the 'history' in this simple taxonomy, too, is that it takes on board diverse and contradictory events and interpretations of

events: for instance, evidence that Y was responsible *versus* evidence that Z was responsible.

Managerial storying : scriptal features

The argument so far has emphasised how people look for coherence in stories and use stories to look for coherence in reality. It has also suggested that the writing of history resembles storying when it provides both explanation and understanding. Intermediate forms like annals and chronicles, which for managers resemble the heterogeneous 'texts' of activities and reflection in the workplace, only become 'stories' when there is a deliberative narrative shaping and an interpretation of the complexity and ambiguity of experience.

This implies that stories 'evolve', a position suggested by the referential hierarchy back in Chapter 4, which argued that concepts are subsumed by propositions, which are subsumed by scripts which are subsumed by stories themselves. Typical SCRIPTS deriving from investigators like Schank emphasise how, for any number of events (say, visiting the doctor or going to a restaurant) there are actions and states common to them all. These actions and states may be said to form a general script: eg for all visits to the doctor there is a time when the doctor asks the patient questions. People may have specific scripts (eg some people may be afraid of the doctor), but it may fairly be said that there are many so-called 'superordinate' scripts (Greene, 1986).

In organisations, scripts are common. Employees use scripts to understand the events in which they participate and which affect their lives. Scripts also

provide guidance to suitable behaviour, like the operation of a machine or dealing with a customer. It appears that many employees in an organisation may hold scripts in common, probably because environmentally and in terms of organisational culture, their experiences and expectations have been similarly conditioned. This can be seen in the similarities between people when meetings take place, appraisal schemes are introduced, and issues like leadership and fair play are discussed.

An organisational script, then, is 'a schema held in memory that describes events or behaviors (or sequences of events or behaviors) appropriate for a particular context... A script is a knowledge structure that fits predictable, conventional, or frequently encountered situations...People in organizations know how to act appropriately because they have a working knowledge of their organizational world. They enact the "right" behaviors most of the time in part because they retain a cognitive repertoire of scripts fitting a host of organizational settings' (Gioia & Poole, 1984, Schank & Abelson, 1977).

In organisations there are many predictable and recurring events and behaviours, not least of all because there are paradigmatically and ideologically approved and accustomed ways of doing things and responding to them. For familiar situations, scripts are performed automatically, while for novel situations they can be used heuristically as knowledge structures which help to 'reduce the cognitive complexity of decision making' (Gioia & Poole, 1984). Selection and appraisal interviews typify situations where familiar and novel events may occur, with corresponding script-based and script-free responses. Gioia and Poole rightly point out that much of the research in this area has been directed towards stories and text rather than to the use of scripts in ongoing behaviour in pragmatically realised settings.

With regard to the referential hierarchy, which argues that managers represent meanings (referents, internal and external) in forms of discourse (concepts, propositions, scripts, and stories) some of which can be exteriorised by researchers, we may fairly suggest that many managers construct scripts when particular managerial concepts are raised or propositions stated.

Many managers appear to regard the concept of 'effectiveness', *tout court*, as too abstract for practical working usage, but will readily acknowledge that, to make it workable, to contextualise it in a frame of meaning for day-to-day management, they will 'enpicture' it (the metaphor is deliberate and schematic) in terms of situations when they were effective, or when others whom they may happen to admire or despise were so.

This is demonstrated by many writers on management. Talking about managing for health and high performance, Blanchard and Tager (Blanchard & Tager, 1986) refer to good and bad bosses. They ask 'Can a bad boss make people sick?', and answer themselves by saying 'yes', by 'being unpredictable, whittling away at their self-esteem, setting up win/lose situations, and providing either too much or too little stimulation on the job'.

A full-scale story soon follows, in which Beth works for an airline under a supervisor who is such a boss. In Beth's own words, 'I guess it started out as one of those woman-to-woman rivalries..I didn't expect to be coddled, but I was totally unprepared for her icy stare and her utter lack of warmth. When I gave presentations, she never encouraged me... She had a red-hot temper, and she used it on me freely... I hated being chewed out, but sometimes it was actually a relief. At least when she pointed out my mistakes...Luckily, Gina soon was promoted out of the department...now I had a new supervisor...Now I finally feel that I'm working up to capacity'. Such a method is commonplace, too, on the many

management and personal development courses which are available (eg Tice, 1990).

Research was carried out into a set of stories submitted by students of management and into another set submitted by practitioner-managers on the theme of what it was like to be effective at work. Differences of approach, arising from knowledge and ideology and experience, were anticipated, and the investigation below will lay out the major findings of this research. Both groups of respondents confronted a situation which had elements of the familiar and the novel, enabling analysis of script-dependence and script-freedom.

Before examining this research and explaining its methodology, however, it is important to map out several other important factors which bear upon the matter. The discussion over succeeding pages will follow the following headings, and lead to a discussion of the stories indicated above.

- (a) what kinds of stories organisational scripts can turn into;
- (b) what ancillary elements (drawn from context) are integrated into the process of constructing stories;
- (c) what makes stories plausible (the EXPERIENTIAL dimension);
- (d) the extent to which stories are about success (and may be self-serving);
- (e) what storytellers regard as valuable as 'lessons' (the AXIOLOGICAL dimension);

(f) the extent to which storytelling is retrospective;

(g) the contrast between what happened and what storytellers
would like to have happened, or think should have happened
(the DEONTIC dimension).

(h) why stories? 'as if' metaphorising and the deontic 'as if'.

These will be discussed step by step, and the ideas demonstrated in scripts and then stories.

What kinds of stories organisational scripts can turn into

The content and general features of a script resemble those of a story. Scripts have a setting, characters, and a plot. Scripts also reveal how people construct narratives of events and states which they experience or think they might experience in the future. It is possible to say that scripts provide people with a way of dealing with situations which may be like, or which they may regard as being like, situations experienced in the past. These are the 'cognitive' and 'behavioural' aspects of scripts described by Gioia and Poole (Gioia & Poole, 1984). By this token 'the concept of a script meets the two criteria for a useful framework for exploring the cognitive and attitudinal impact of stories' (Martin, 1982).

At the same time scripts pick out the main structural characteristics (or 'commonalities') of stories, those features which arguably recur in generic or

ritualistic situations (eg the regular office meeting on Monday mornings, the continual interaction with abrasive colleagues, the impact of organisational culture through, say, the rewards given for hard work or self-serving ingratiation, all implicitly opportunities for the exercise and recognition of 'effectiveness' for a manager).

The organisation story, however, is more elaborate than a script : it has scripts nested within it, which, like the generic formulae of popular fiction (eg 'the other woman' in the romance, the moral archetypes in the detective novel), noticeably recur from story to story (Cawelti, 1969). The script has a setting, characters, and a plot: stories have all these, more elaborately and idiosyncratically developed.

While the script may indicate a setting of the selection interview, the story will fill out the unique circumstances of the company, the department, the manpower planning position, the kinds of people the company wants to recruit. While the script may sketch out the characters, the story will identify Alison Jones as Head of Personnel and John Smith as Company Secretary, imply or infer their public and private agendas for and while interviewing, acknowledge their relative power positions and personal ambitions, highlight the candidate's unique qualities and appearance.

Introspective and attitudinal levels may be implied or made explicit (as we would expect from a literary text like a novel), so that characters might have pasts, pre-established sets of attitudes (cognitive scripts, such as those based upon the self-concept that 'I tend to interview new recruits pretty ruthlessly to guard against any halo effect in the interviews'), and self-regarding behaviours ('I know I always do that in such situations', 'She always tends to behave like that when that is brought up').

While the script may indicate a plot (eg interviews are necessary because the company needs to enrich its skills base), the story develops on this, possibly suggesting that there had been a battle between departments to unfreeze posts, difficulties in getting appropriate staff together to carry out the interviewing, private histrionics designed to impress other members of the interviewing panel, the interpersonal ups-and-downs of the exchanges in the interview, any ambiguity or lack of consensus on acceptance or rejection of the candidate.

A clear distinction between script and story can be detected when we get people to talk about such interviews (whether they conducted them or were vetted by them). Often, unique and highly personalised events and impressions are recalled in a, by then, coherent-through-hindsight account of the interview. Moments of effectiveness are picked out ('That question really floored him', 'I felt my reply impressed the chairperson on the panel but I wasn't so sure about the others...') that are unique to that particular interview and which illustrate a complexity of setting, characterisation, and plotting on a level of story rather than a level of script.

If, on the other hand, informants are invited to characterise a selection interview, or outline what the selection interviews which they have had during their career have in common, there is a likelihood for them to represent the events and states in scriptal form, picking out commonalities or generic formulae, even if idiosyncratic features are superimposed (eg '"There I go again!" I thought'; 'I've never been very successful at handling large selection panels: I prefer a one-to-one').

Another major difference between a script and a story is how stories can handle contradictory evidence. Many situations are complex on the one hand because of their complicatedness (eg there are political or interpersonal tensions, there

are internecine goals), and on the other hand because people interpret them differently, while they happen and afterwards. For instance, in a university, Dr Price is regarded as an excellent lecturer by those colleagues who know his work and hold his subject interests in high regard. But by those colleagues who do not, Dr Price is held in low esteem. Dr Price leaves unexpectedly at the end of the academic year to take up a promoted post elsewhere.

Both sets of colleagues, assuming they do not ask him directly (which, of course, they might), infer either (a) that he is leaving because he is good and deserves promotion or (b) that he is leaving because he is no good and has jumped before being pushed. Two 'truths' exist here, each with a complex and largely surmised hinterland of possibilities. A third truth may exist, a mixture of the other two. A fourth truth may be discovered if Dr Price is asked, and this fourth truth may be of several kinds depending on what he decides to tell us. Other truths may become apparent when, after his departure, colleagues ask why he left. Above all, it might be found, Dr Price left because he could not work with his head of department (whom everybody else finds difficult).

We may see this as a story about the effectiveness of Dr Price *mediated through a the complex machinery of organisational storying*, consisting as it does of a rich amalgam of overt and covert discussion, gossip and rumour, memoranda and minutes, official diktats and personal conversation. Such stories may be complicated further by power, hierarchy, class, education, and gender factors, all of which personalise or idiosyncratise the story, and demonstrate how important it is to regard any story, other than the simplest, as a structure embedding numerous cognitive (knowledge and attitudinal) and behavioural scripts, and usually more than any sum of the parts.

What ancillary elements are integrated into the construction of stories

Typically, managers, reviewing their everyday activities, demonstrate this historian's art in the sense that Carr described it (see above). Evidence is multifarious - hearsay, gossip, memos to and from, data from a management information system, information from a book, talk at a conference, a phone-call made or overheard, half-remembered promises, misunderstandings, truths filtered out through rivalry or fear or friendship. Much is absorbed or half-absorbed in a continuous present. Much is dealt with at speed, with thoughts on other things - urgent things to be done soon or instead, likely consequences if trivial things are not put right instantly, important things that require high-quality intellectual input. These many strands are woven into the narrative of a manager's story (eg an account of a meeting, a day, a project, a promotion, a challenge, a career).

The range of evidential sources for organisational discourse is wide, yet the strand of story weaves down through the centre. Peters and Waterman (Peters & Waterman, 1982) found this in their research into American business. Speaking of values (ie a constituent part of the ideological wisdom referred to earlier), they suggest that 'values are not usually transmitted ... through formal written procedures. They are more often diffused by softer means: specifically the stories, myths, legends and metaphors...'. .

Ethnographic research into organisational discourse, narrative and other, reveals a wide diversity of sources of information, and this reflects the diversity of information absorbed by the managerial narrative. Van Maanen (Van Maanen, 1979) states that 'facts' arise in the workplace, but these are interpreted 'situationally, historically, and biographically... by members of the

organization'. Speaking of the police, he gives an example: 'Thus, the arrest pattern may be seen by some as the result of an administrative attempt to "crackdown" on prostitution'.

Everyday police talk, Van Maanen says, can reveal an informant's 'formulation of social structure' within the organisation (eg role relations among police) and 'background expectancies'. Verbal depictions are often seen in pragmatic contexts and can only be understood in relation to them. He warns the researcher that people often lie about things that matter most to them, a point which refers not just to informant-researcher relations but employee-employee relations and the possible way in which the informant seeks to deceive himself.

Earlier it was argued that stories subsume scripts (both cognitive and behavioural), and develop scriptal features like setting, characterisation, and plot into complex structures able to take account both of contradictory evidence (eg viewpoints about the effectiveness of Dr Price) and the tendency narrators have to interpolate their own views and interpretations.

These characteristics of storytelling, from both teller and told points of view, emphasise the notion that both participants are looking for a coherence of discourse, and that in turn is essential for understanding. Each constructs the story by harnessing prior paradigmatic knowledge and ideological wisdom, and using knowledge of previously encountered story shapes (or narrative schemata). To this extent, then, creating and responding to story is a constructivistic activity (Hannabuss, 1988).

We should expect, therefore, any analysis of managerial storying to take on board the diversity of evidence indicated above, and to demonstrate that, in the telling and response, constructivistic activity is present.

Popular managerial stories have been identified (Martin & others, 1983; Mitroff, 1975; Peters & Waterman, 1982; Handy, 1978; Wilkins, 1979). A classic example is told by IBM employees when a security supervisor dared to challenge Thomas Watson Jr., the formidable chairman of IBM's board (cited by Martin & others, 1983). The supervisor was Lucille Burger and her job was to make sure that people entering security areas wore the correct clearance identification. Watson was approaching such an area. He wore an orange badge (allowing him access to the plant as a whole), not a security green one. Burger knew who Watson was but told him he could not enter since he did not wear a green badge. "Your admittance is not recognized". That's what we were supposed to say', she said afterwards. One of Watson's entourage asked her if she knew who Watson was. Watson raised his hand, while one of the party strode off and returned with the appropriate badge.

This is not a script, because Burger and Watson are unique, even though the wearing of green badges for security areas applied across the company (and therefore was scriptally routinised). Neither is it a script because an employee of IBM obtained the right badge after being upbraided, for the same reason. Part of what makes this a story in its own right is the suspense arising from the unique confrontation between an ordinary employee and the top man. Part of it arises from the potential conflict between right and wrong, rules and privileges.

The idiosyncratic manner in which both characters dealt with the situation, and the clear psychological resonances for both in their initial reaction and subsequent behaviour (as both quickly accepted a common procedure and moral outcome as an 'effective' way through) makes it a story. The concept of 'effectiveness' interestingly combines both a way through the procedural maze

AND a mutually satisfactory way of resolving a problem without loss of face on either side.

The solution 'fits' to the view of reality of both central characters. Since the story was widely reported, it rapidly became part of the organisational culture of IBM. Its ready acceptance arguably arose because employees and managers at IBM recognised that the story had a 'message' for them in their experiential setting. These two ideas, of a story being 'real' (ie being plausible), and a story having a 'message' or a 'lesson' will be considered below (see sections [c] and [e]).

Typical managerial stories are identified by Martin and others as including (a) 'Can the little person rise to the top?' (often with Horatio Alger romance as boys with humble beginnings become captains of industry), 'Will I get fired?' (and how its done by the company), 'Will the organisation help me when I move?' (stories about relocation, some where the company put itself out to help managers whose furniture took a long time to arrive), 'How will the boss react to mistakes?' (does the boss support you or skin you alive), and 'How will the organisation deal with obstacles?' (eg how AT & T dealt with a famous fire). Martin's thesis in citing these stories is to identify the uniqueness of the organisational culture which they typify.

What also emerges is the way in which, as stories, these narrative structures embed a diversity of scripts and evidence, and provoke or evoke a response (from the hearers, employees initially, and later the wider community of readers) which shows how meanings are being constructed. For instance, all the stories are regarded by employees as insights into organisational procedures or thinking which could not or might not be possible any other way.

Stories are shedding light on settings, characters, and plots in a unique way, but also in an extrapolative way, since the audience infer from them about other times when similar things might occur, future events in which they might be asked to play a role, and the extent to which the story encapsulates something distinctive and recurring about the company as a whole. For instance, if a story describes how an insurance company 'will not make a drama out a crisis', then customers come to believe that, if they personally were involved, that is what would happen for them. The effectiveness of the company can be mediated through such a story, and this is what makes stories powerful, as advertising agencies and marketing executives know.

In library and information management there are similar stories. One is the story of the new arrival: the conflict of generations and 'new' as opposed to 'traditional' expertise and attitudes, and often taking the form of a young professional librarian arriving with 'whizz-kid' ideas from library school and showing up the fustian of the workplace. Another is the story of how fairly people are treated. This may take the form of what library managers earn in relation to comparable professionals, or how possible it is for library managers to advance up a career ladder to the top. Another is based on image, that librarians are essentially bookish and introverted, and accordingly stories are there to prove and disprove this claim. Another is associated with information technology, techno-phobia and effects on health (eg radiation and VDU screens), and manpower decisions which discriminate against long-established employees in favour of machines.

Many stories are associated with change and the fear of change : eg how professional managers, rather than professional librarians with experience of management, are taking over as overlords of the leisure and recreation

departments (which include public libraries) in local government; eg how middle managers are fearful that their craftsman skills will not match up to the challenges of a gamesman era (see the discussion of changing paradigms and effectiveness in Chapters 1-5 inclusive), and may lead to personal trauma (negatively to burn-out, demotivation, anomie, dismissal, and positively to retraining and new opportunities and self-esteem). Such stories vary with sectors of the information profession (eg public and academic libraries), and with age and promotion levels of informants. The assumptions people make, the meanings they use, and the degree of openness to the researcher are other important factors.

Some of these stories (in scriptal and full story forms) will be analysed below.

What makes stories plausible (the experiential dimension)

It is possible to allege that stories are mere fictions and unrelated to known reality. Of course, stories, like any account of real life, can be exaggerated or distorted, and untruths can be mediated, for malicious or innocent reasons, through stories. If this is true, then part of the reason must be associated with the highly *oral* character of stories. For every story recorded by chronicler or researcher there are hundreds of stories circulated daily in offices and on shop-floors. Some get into tabloid newspapers (eg those about Robert Maxwell or Kerry Packer, the media moguls).

It would be a separate project to examine the oral transmission of stories in organisations. Even so, it is possible to speculate on (a) the content (b) the

process of dissemination, and (c) the impact of storytelling on itself and its tellers. Content would certainly pick out recurring or common stories or themes (eg how bosses behave, how employees are treated, who is ill or attractive or successful or promiscuous or smelly). The process of dissemination could focus on formal modes (instructions, statements) and informal modes (grapevine gossip), and the social and organisational structures through which both rushed or trickled (with familiar sociological phenomena like opinion-leaders and gatekeepers).

Stories run and run, change, alter codes of communication within an organisation, and attain a recognised status as demotic forms of representing knowledge within a department or organisation. Storytelling has an effect on its tellers, too, since people get known as originators of 'good' (ie reliable or piquant) stories, and come to see themselves in such a role. They become keepers of the organisational mythology, having a binding anthropological effect on the group in the way Llosa's habladores had on his South American tribe.

It has been suggested (Mitroff, Nelson & Mason, 1974) that the very activity of using 'storied' information (which they term 'mythic or personalistic information') makes information highly partial, specific (in the sense that it is true only for the individual rather than the organisation), heightens drama, increases redundancy, and introduces moral stands. They contrast this with 'scientific or nonpersonalistic information' which is impartial, generalisable, concise, precise, and amoral. The issues here will probably remind the reader of the contrast made earlier between explanation and understanding, and of the position at the start of this chapter where the rich paradigmatic and ideological mixture of 'story' was described.

The contrast implied here reflects the power of the traditional emphasis in management of rationalism, and distrust of the intuitive explored more fully in Chapters 1 and 2 (see Simon, 1964; Denhardt, 1981). Peters and Waterman (Peters & Waterman, 1982) emphasise that 'excellence' (a version of 'effectiveness') draws both on rationalistic and intuitive, quantitative and qualitative, factors: 'Our imaginative, symbolic right brain is at least as important as our rational, deductive left. We reason by stories *at least* as often with good data. "Does it feel right?" counts for more than "Does it add up?" or "Can I prove it?"'.

Given this, we should expect to find stories in their study of excellence in 'America's best-run companies'. They state that 'all the companies we interviewed, from Boeing to McDonald's, were quite simply rich tapestries of anecdote, myth, and fairy tale... These days, people like Watson [T J Watson of IBM] and A.P. Giannini at Bank of America take on roles of mythic proportions... in an organizational sense, these stories, myths, legends appear to be very important, because they convey the organization's shared values, or culture'. Peters and Waterman cite the company Frito-Lay, a subsidiary of PepsiCo which sells over \$2 billion worth of crisps every year. Its large sales force and high service level are legendary, and are typified by tales of 'salesmen braving extraordinary weather to deliver a box of potato chips or help a store clean up after a hurricane or an accident'.

Even the argument that gossip is merely ephemeral can be countered when we consider how important organisational gossip is in informing people and enabling them to compare information. Often organisational gossip is about the exercise of power. When new information reaches us, we have to adjust to its difference, unless we reject it, but even then we do it in relation to a standard (plausibility, relevance, importance, urgency). Festinger (Festinger,

1954) argues that this is an importance vehicle for self-evaluation (Suls, 1977).

There is another argument which seeks to assert that stories are essentially for entertainment (presumably in the sense that Graham Greene appeared to dismiss his lighter novels as 'entertainments') (Brewer & Lichtenstein, 1982). This view is readily countered by saying that, although fictions like popular stories are indeed intended to entertain, many such as fables are intended to persuade, and many such as newspaper narratives are intended to inform. Indeed, it may be asserted that stories not only have the types of complexity discussed up to now, but demonstrate an ability to persuade and inform *as well as* and even *instead of* entertain. Managerial stories do not just entertain, for the many reasons associated with the roles of narrative discourse and with the diversity of organisational culture developed through this chapter.

It can be argued also that many stories are 'really theories thinly clothed in narrative forms' (Crites, in Wiggins, 1975), as can be seen in scores of works on management which exemplify managerial principles and practice by reference to storied narratives: eg the theme of competent self-management exemplified by a story about a workaholic manager called George, or a conversation between Andrew whose personal values were unclear and Martin who plays his mentor, in Woodcock & Francis, 1982).

Indeed, popular usage confirms this: typically, after describing or discussing a complex process or problem, and at the point when they draw away to comment on or moralise from it, writers say 'Too often this is the story' (eg Deming, 1982, 128). The usage 'story' here is clearly a device to represent and summarise the array of facts and discussion leading up to that point. It is regarded as a *story* when seen in its entirety, material and discussion (or, in Labov and

Walezky's terminology, 'complication-resolution' and 'evaluation' (Labov & Walezky, 1967)).

If such stories were not able to deliver a credible and relevant message, managers would not bother with them. The messages can be of many kinds, from getting a clearer idea of how to manage your time, supervise your staff, introduce a local area network into the office, or understand the thrust of company policy in the EC after 1992, or what people are saying about your working late, how Joyce reacted to your reprimand for lateness, what the despatch people think of your new cutbacks, or how Alan can afford to run a Porsche. Because of this, a key element in using and believing in stories in management must be based upon their perceived ability to reflect experiential reality.

Kolb and Schon both stress that effective management relies upon experiential learning and the manager's ability to reflect on - and learn by so reflecting on - experience (compare Chapter 4). Management is a practical activity, done and thought-about-through/in-doing (pace the largesse of management theory that exists). Because of this, a major criterion for using and believing in stories, and in particular stories, is their closeness to perceived reality. By extension, good managers are able to identify, and then work with, the major realities within the frame of meaning at work. They show themselves, as people, who understand the problem, can deal with conflict, and obstacles, can cope with ambiguity, can see the wood for the trees, can motivate subordinates and build teams, can envision where the organisation needs to go and what it needs to turn into. If these characteristics may be said to identify the effective manager, then their opposites, or an ability to do this, identifies the ineffective manager.

This viewpoint predicates that the reality which the effective manager understands and comes to manipulate is one in which 'what matters' and 'what works' are identified more often than not, and more often than by others. Effective managers also demonstrate their 'goodness' by surrounding themselves with teams, or building teams, which can together identify these factors more often than not. It makes for that competitive advantage of Michael Porter, the guru advising President Bush on American industrial development, and for that excellence of which Peters and Waterman speak. It also implies self-knowledge - with regard to skills and shortcomings - and self-management - with regard to development, use of time, identification of priorities, and dealing with feelings and emotions.

It is said that successful organisations change the environments around them. This is partly due to financial, political, and commercial acumen. It may also be seen as an enactment process, in which they 'construct' the environment which impinges upon them. Any act by a major player (nationally, commercially) changes the setting within which all operate. Weick (Weick, 1977) refers to business which by changing its product prices can induce changes in the market, and doctors who by assuming patients have a disease can induce patients 'to act out careers of chronic illness'. His example of actors in the theatre is even more telling: given even random dialogue, actors can turn it into coherent theatre, with accompanying actions, building up a plausible world which is 'then rediscovered as something to which they accommodate their subsequent actions'.

This subtle insight enables us to move from the general claim that effective managers have a strong grasp of 'reality' to the position in which such managers can 'enact' the reality not only of themselves but of their teams and departments.

The argument applies to novices who, as starters in an organisation or profession, or as people with 'naive' schematic knowledge of this enacted reality, perform either with less effectiveness (traditionally perceived) or with forms of deviant or iconoclastic effectiveness. These situations can be characterised, respectively, when a new graduate enters the library profession with plenty of theory but little practical know-how (ie academic rather than street knowledge, Hannabuss, 1991), or where their arrival provokes paradigmatic attrition (as, in stories about training and automation, where new recruits seek to impose technology-based solutions on traditional work practices).

The extent to which a manager may be regarded as 'good' or 'effective', then, appears to depend on his/her grasp of the essential realities of work experience and their application of ideas and influence to and in it. We might then differentiate between effective and non-effective managers by arguing that effective managers more surely and readily identify and choose routes, actions, solutions, which 'deal' with events and states as they happen, and steer successfully between the many hazards and obstacles which might lead to failure - opposition, lack of resources, poor communication, traditionalism, alienation, shortage of time.

It has been argued (Wilkins, 1979 and 1984) that, for the understanding of organisations, we need to identify first-order controls (like company policy and the rules invoked and applied by supervisors), second-order controls (like implicit standard operating procedures applied, say, by employees in a department), and third-order controls which are 'found in the assumptions or definitions of the situation which are taken as "givens" by organizational participants'. He suggests that in the organisational culture stories form a major vehicle to transmit these shared values or 'givens', a finding which has

characterised analysis of paternalistic Japanese as well as more entrepreneurial Western companies in recent years (Ouchi, 1981).

Wilkins suggests that stories play three major third-order control roles: first, they facilitate recall (and he argues that this is more competent when employees are exposed to 'connected discourses' than 'more abstract versions of these phenomena'); second, they generate belief, with the effect of giving employees understandings of matters like fair play, custom and usage, and social roles within the organisation; and third, they encourage commitment. His research confirmed that there was more commitment in organisations where there were more shared stories (although this could mean that the commitment was in fact conformity). Such organisation cultures provide much of a dynamic energy for corporate strategy.

A development of this idea is to say that the organisation itself may be seen as a kind of collective story or storying. Clark (in Baldrige & others, 1975, 98-108) states that

'an organizational saga is a collective understanding of unique accomplishment in a formally established group. The group's definition of the accomplishment, intrinsically historical but embellished through retelling and rewriting, links stages of organizational development. The participants have added effect, an emotional loading, which places their conception between the coolness of rational purpose and the warmth of sentiment found in religion and magic. An organizational saga presents some rational explanation of how certain means led to certain ends, but it also includes affect that turns a formal place into a beloved institution, to which participants may be passionately devoted.'

This statement mixes the rational and the intuitive in the manner utilised by Peters and Waterman earlier, and emphasises the pervasive power of organisational culture. It also stresses that people identify very strongly with the reality of the organisation using these different faculties, and characterise the entirety of organisational activity and meaning with a story-like metaphor.

Later, in an analysis of scripts and stories, we shall use the experiential dimension of stories criterially (along with two others, that of valuation or the axiological, and that of what is preferred or the deontic) to suggest how managers, expert and novice, represent knowledge of their own and others' effectiveness.

The extent to which stories deal with success

Many of the stories cited by Peters and Waterman are about success. Many management writers deal with peak performers, how to succeed in business, themes like 'making my way' or 'creating excellence' or 'thriving on chaos', the implication in all of them being that stories about success are more common than those about failure. It may also imply that, where stories are to be used, they should deal with managerial successes. It is human nature to stress success, particularly in a competitive activity like management. Promotion, respect, self-respect, security, all depend on being successful. It is part of a complex ideology going back to the Protestant work ethic, pervading the history of capitalism (see chapter 3). Natural discretion about personal weakness, coupled with a commercial reluctance to disclose company secrets, work together in the interests of a good press for most companies.

Looking at 'productivity through people', Peters and Waterman cite a story of Hewlett-Packard's Bill Hewlett's cutting the padlock off the laboratory stock door and encouraging engineers to take equipment home for personal use, as an example of how the firm, by emphasising its 'people philosophy', was prepared to trust employees. Similarly Rene McPherson, chairman of the Dana Corporation (which makes propeller blades and gearboxes), abolished time clocks, with the result that 'everybody comes to work on time and leaves on time. That's the record says. Where there are big individual exceptions, we deal with them on a case by case basis'. It is said that the 3M philosophy 'Never kill a new product idea' underwrote a climate of innovation in which transparent cellophane tape was discovered.

Such stories can focus excellence and excitement in an organisation, urging employees on, giving them 'headroom' and motivation to innovate, and do so within a generally known philosophy. However, for every positive there is a negative, for success stories show how failure was successfully conquered. People who succeed are regarded as heroes. Martin and others (1983) cites tales of unusual diligence or ingenuity, like 'a brilliant scientist working day and night to solve an intractable problem'. Martin characterises negative stories simply as stories where things were carried out by as part of ordinary routine or by characters who do not deserve mention by name.

Wilkins (1984) suggests that negativity might exist in stories where there may be little historical 'truth' in the event portrayed (eg a senior manager ripping up a complaint from middle management) but where the story symptomatises a general lack of willingness for senior management to communicate to those below them. This approaches more the definition of the negative story which most people would recognise, where success was not attained or obstacles overcame.

In library management, there are many such stories. The appointment of a series of notoriously weak depute librarians in an academic library gave rise to the story that the appointing librarian, a very authoritarian personality, wanted a cipher in that post. A story went round that at an interview a comment was made to the effect that the depute stood in for the Principal Librarian at meetings when he was ill and that he was never ill. Another story, about the redundancy of an employee suffering from mental strain, was that the employee was 'given the rope to hang himself in a counselling interview with the head of department', after which it was easy to persuade the employee to go, and after which other employees took care to behave guardedly in meetings with the head.

A further story concerns a principal librarian who was also a widely recognised poet who was a poor communicator and clock-watching until retirement. He was said to keep a pair of binoculars on his desk to look through his office window at female students crossing the campus. Many negative stories deal with employees' fear of change or their apparent inability to cope with it, in particular with the changing roles required of them. These roles often hinge around mastery of IT or financial management or developing skills (eg marketing) for which they do feel they have been trained and which they might resent having to adopt.

There is an interesting link between the stories and implied issues here and the findings of the effectiveness survey in Chapter 5. There a range of informants (middle and senior managers in libraries in Scotland) were asked to identify and rank aspects of 'effectiveness' which they regarded as important. Findings revealed that being professionally up to the mark (with services) and knowing how to handle people were regarded as most important. Least so were aspects of effectiveness like handling the budget, generating income, and applying marketing skills. Consistent with the logic of that survey, what was

regarded as important could be either (a) what was important and the informants felt they actually had those particular aspects of effectiveness, even if they had not; and (b) what was unimportant and the informants felt that there was no need to develop skills of that kind.

Either kind of response helps us to identify those areas of effectiveness in which successes and failures, positive and negative stories, might be found. Research confirmed that this was broadly true. Ten middle managers in academic libraries were unobtrusively invited to provide examples of stories which represented successes and failures for them in their present post. They were required to provide one example of success and one of failure each. Here, only the *themes* of the stories are represented. A comparison was then made with the highest and lowest competences for such managers as elicited by the competences survey discussed in Chapter 5.

The intention was to test the match between the two sets of choices, from the competences and from the story-themes. The argument was that, the closer the match between the lists of choices, the greater confirmation existed that, when managers chose to represent their knowledge in story form, the stories selected did indeed represent their major preoccupations. From earlier discussion of the experiential reality of effective managers, it can be argued that, if there is such a match between competences and choice of story, then such managers demonstrate an understanding of the experiential reality of management which suggests that they are effective managers.

To remind ourselves of the original list of competences, high and low, identified by middle managers in academic libraries (see Chapter 5), the high competences were (1) knowing how to build effective teams, (2) knowing how to achieve results, (3) knowing how to negotiate effectively, (4) knowing how to

set priorities, and (5) knowing how to get your staff to achieve results. The low competences were (1) knowing how to generate income for the service, (2) knowing how to get adequate funding, (3) being able to write effective reports, (4) knowing how to handle the budget, and (5) familiarity with marketing techniques.

Stories from expert managers were systematically gathered as part of this research programme. The structure was that of choosing a sampling frame on representative or quota principles (ie on a representative range of library types and levels of management), and sampling randomly within categories. In this case weighting was applied so that stories of any type had an equal chance of being selected. From one hundred such (written) stories, ten were selected for detailed analysis.

From these the following dominant themes emerged. The themes were divided into 'success' and 'failure', and were found to include both (a) things that managers thought important and had succeeded or failed in, and (b) things that they thought unimportant and had succeeded or failed in. The existence among both categories of successes and failures which were sometimes public and sometimes personal was disregarded.

Since there were ten informants, and there were successes (S) and failures (F), a coding was devised to represent each response (eg S1, S2, F1, F2, etc) and pair of responses (S1/F1, S2/F2, etc.). It will be noticed, logically enough, that in some cases failures are obverses of successes. Themes are represented 'as stated' by informants.

'SUCCESS' STORY THEMES

- S1 : The development of a new library building despite cuts.
- S2 : Having a really good working relationship with academic staff.
- S3 : The recent introduction of an automated circulation system.
- S4 : Extent of user independence now we have an OPAC [online public access catalogue].
- S5 : Getting an MBA by part-time study has given me a new impetus.
- S6 : We've been able to keep up with the pressure on us, despite staff shortages.
- S7 : The team structures are really working, allowing me to get far more long-term planning done.
- S8 : Looking hard at priorities has been painful but I think we are a lot more cost-effective now. Let management come and look.
- S9 : Despite early misgivings, staff appraisal has sharpened everybody up a lot and we have a clearer sense of direction now.
- S10 : Being able to earn some income from some services, although it's been a strain on the staff, and I'm not sure I really approve.

'FAILURE' STORY THEMES

- F1 : I won't be here much longer under the earlier retirement arrangements. No bad thing, because I want a change now.
- F2 : For the last three years I've been unable to persuade the Library Committee to take a realistic approach at the budget.
- F3 : We just don't seem to be able to get suitable staff when we advertise for them.
- F4 : Doubts about being able to deliver a satisfactory service to the academic community.
- F5 : I think some members of the academic staff rather take us for granted.
- F6 : The integrated automated system has given us a lot of trouble.
- F7 : It has been impossible to unfreeze the middle management posts we really need.
- F8 : Staff are over-working and this is affecting their families.
- F9 : We're so busy that keeping up with developments is impossible.
- F10 : There is a lot of disillusion in the public sector at present.

We are now in a position to construct a simple matrix showing important/high and unimportant/low competences (vertical axis) and success and failure story-themes (horizontal axis). The story-themes are represented by their codings, and data presented in Table 34.

	SUCCESS								FAILURE										
<hr/>																			
Important/high	S1	S2	S3	S4	S5	S6	S7		F1	F3	F4	F5	F6	F7	F8				
	(S8?)		S9	(S10?)					F9	F10									
<hr/>																			
Unimportant/low	S8		S10										F2						

Table 34 : Competences and success/failure matrix

The matrix in Table 34 confirms the thesis that stories identify most (if not all) the themes elicited as important in the former test. There is a strong match between competences and choice of story, which allows us to suggest that

the informant managers do have an understanding of the experiential reality of management which in turn suggests that they are effective managers. We should interpret the data in terms of how such managers can identify both successes and failures in response to important/high competences. Failure in itself is not so much a contradiction of being effective as a way of confirming effectiveness, since such managers have recognised their failure to achieve something they know is important.

The extent to which these managers include the concept of 'reality' into the story-themes is itself interesting, and tends to serve our emphasis on experiential reality. The term 'real' is used in various forms in FIVE of the story-themes:

- S1 : a *really* good relationship
- S7 : team structures *really* working
- S10 : *really* approve
- F2 : a *realistic* approach
- F7 : management posts we *really* need.

Further analysis, to elucidate the conceptual foundations for this stress on reality, were carried out, first, by examining the procedural or evaluative aspects of the responses, and, second, by examining the areas of management identified by informants and classifying them by craftsman and gamesman categories, those two major aspects of paradigmatic change affecting views and performance of 'effectiveness' identified by Chapter 5. 'Craftsmen' are managers who orientate themselves to, and define themselves in relation to, traditional professional skills, while 'gamesmen' are managers who orientate themselves to,

and define themselves in relation to, generalistic and often entrepreneurialistic skills, the skills of Realpolitik within the organisation.

First, the procedural or evaluative aspects of the responses. Criteria of effectiveness have been explored by the earlier survey. By looking at story-themes, we can extend that. In the 'success' story-themes, there is a strong emphasis on the 'new' and the 'now'. There is a new building in S1, a recent system in S2, and a new impetus in S5. 'Now' is referred to in S4 and S8. Another important concept is 'being able' or 'enabling', explicit in S10, but implicit in most of the success story-themes. A further concept is that of progress, clarification, more, better: there is more planning in S7, a lot more cost-effectiveness in S8, a clearer sense of direction in S9, and a good relationship in S2. This is achieved 'despite' problems (in S5, S6, S8, and S9) (see Figure 8).

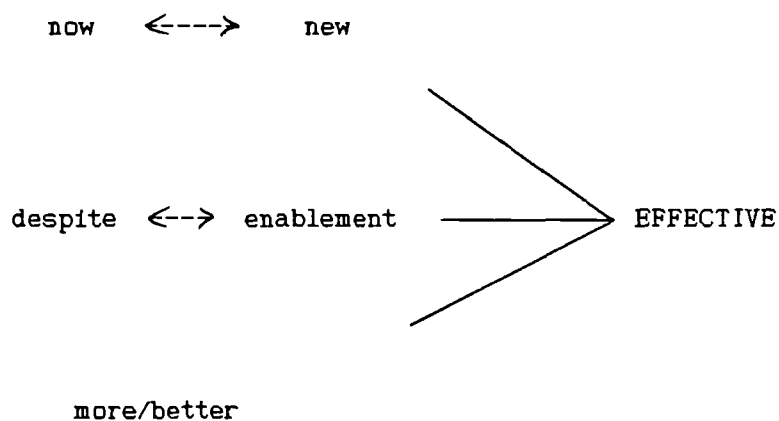


Figure 8 : Conceptual arrangements in stories of effectiveness

By the same token, we might look at 'failure' story-themes. There a dominant concept is that of 'being unable' or 'disablement': unable to persuade the committee in F2, unable to get staff in F3, unable to unfreeze posts in F7, unable to provide a satisfactory service to users in F4, and unable to keep up with developments in F9. This is attributed to problems or difficulties, internal and external, the second dominant concept: academic staff take the library too much for granted in F5, the automated system is faulty in F6, and there is disillusion in the public sector in F10.

Intermediate between these two concepts is that of having too much of the wrong thing, a point made in F1, F3, F5, F6, F8, F9, and F10. Implicit in the disablement is the notion of something that does not work, cannot keep up, or is inadequate ('old/bad' as opposed to 'new/good').

The conceptual arrangement is displayed in Figure 9. It becomes clear that the crucial and conceptual factor is the extent to which difficulties can be overcome. Hence, the pivotal position of the concept 'despite'. It may be argued that where managers are, or regard themselves or their colleagues or organisation as being, unable to keep up ('old/'bad'), they are, or regard themselves, as 'ineffective'.

The concept 'now' acts as a temporal conditioner and applies equally to both sets of concepts, which have come now to represent 'success' (on the right of the figure) and 'failure' (on the left). A second task at this stage is to consider those areas of management identified by informants and classify them in relation to the craftsman / gamesman model mentioned above.

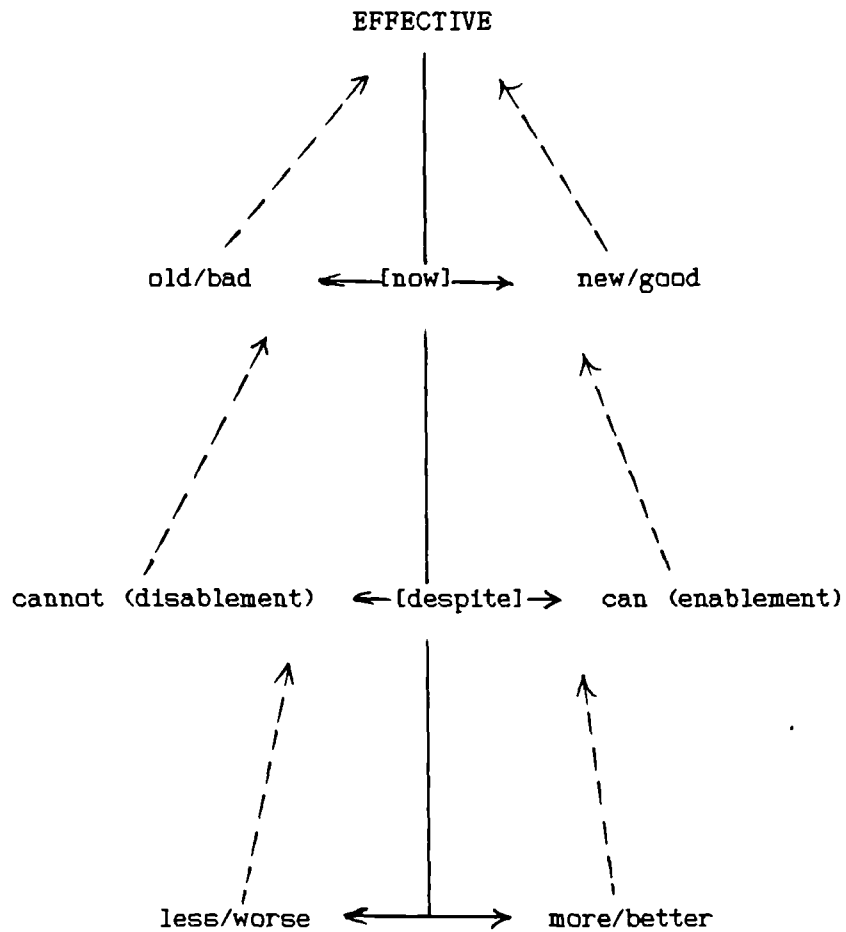


Figure 9 : Full conceptual arrangements in stories of effectiveness

The areas of management can be organised as a knowledge domain (see Table 35). Against each area is recorded the 'S' (success) or 'F' (failure) cited in the story-theme.

STAFF	SERVICES	USERS	ACCOUNTABILITY
Team structures S	Circ system	Satisf	Cost-effective S
	S F	F	
Shortages S F			
Recruitment F			Income earned S
Overwork F	Automation S	Acad	
		staff S F	
Not keeping up F			Budget and cttee
			F
Training & devt S	OPAC S		
Appraisal S			
Motivation F F			

Table 35 : Applied knowledge domain of respondent managers

An assumption is made that neither craftman nor gamesman managers want failure, but that each interprets failure differently owing to their mind sets. An emphasis on traditional service and professional knowledge and values will affect a manager's view of what success and failure actually are. Similarly, an emphasis on entrepreneurial, politically-aware knowledge and values (characteristic of generalist management rather than specific to library management), will affect a manager's view of what success and failure are.

In consequence, we may suggest that an examination of the ten original competences, high and low, emerging from the survey in Chapter 5, enables us to highlight differences between craftsmen and gamesmen in the deployment or valuation of the competences, and that the resulting taxonomy provides the basis for an indicative analysis of the applied knowledge domain of the managers which has emerged at this point in the thesis.

We can arrange the competences so as to differentiate between craftsman and gamesman characteristics (see Table 36).

Six competences are held in common, of which five were originally regarded as highly important, whether achieved or not. Noticeable is the coverage by the gamesman manager of all ten competences, as being considered relevant and important for effective management in such a situation. On the other hand, the craftsman manager emphasises those competences identified as high by the original survey, along with one other, handling the budget.

Two inferences may be made from these points. First, that gamesman managers tend to rate highly those competences which traditional professionals regard as of little importance. Second, that gamesman managers, in facing an applied knowledge domain like this, are likely to deconstruct and reconstruct it in

	CRAFTSMAN	GAMESMAN
	<hr/>	
1	Build effective teams	Build effective teams
2	Achieve results	Achieve results
3	Negotiate	Negotiate
4	Set priorities	Set priorities
5	Get staff to achieve results	Get staff to achieve results
6		Generate income
7		Get adequate funding
8		Write reports
9	Handle the budget	Handle the budget
10		Use marketing techniques

Table 36 : Craftsman and gamesman manager competences

their own image, so as to emphasise their own (different) priorities and valuations. Accordingly, to devise an applied knowledge domain for a gamesman manager, we should start by examining those failures which should be turned into successes.

The assumption is that gamesmen turn failure into success. Their approach is strategic or proactive, while craftsmen tend to be tactical or responsive. The

approach of the gamesman is encapsulated by the axiom 'reality can be changed' (just as politics is sometimes called 'the art of the possible'). This can then be developed by picking out those failures which *must* be changed to successes if the situation is to be handled effectively. Another assumption is made, that things cannot simply be allowed to rest as they are. Such failures include five of the eight elements associated with staff (and eight of the twenty are to do with staff!). The key five elements are manpower planning, recruitment, keeping up-to-date, overwork, and motivation. In addition, other key elements are associated with the running of services (ie service impact), and with financial control (ie getting enough funding, persuading sources [like committees] to allocate enough).

If we were to characterise the managers, craftsmen or gamesmen, running the service as 'us' and influential bodies who need to be persuaded to part with funding (in this case the parent institution) as 'them', then we might infer that in the craftsman model effectiveness is measured by the extent to which 'they' receive quality professional service from 'us'. This might be contrasted with the gamesman model in which there is the craftsman element, but added to it is the factor of optative change (ie change wished for). This optative change is translated into political pressure.

In the course of this translation, the goodness of service, reflected in the exercise of professional skill, is redesignated as contribution to the organisation. What it does is turned into what it contributes. What it might have done is turned into what it might do. Traditional skills are redesignated as assets, tasks like stock control renamed as collection development, certain activities targetted for income-generation, user study analysis given a market research application, budgets applied under cost centres.

This is both an image and a substantive change, both knowledge and ideology based. Specific changes are targetted for coming online (eg more training to counter not keeping up and low motivation, human resource auditing to reverse poor recruitment, management information systems for improved decision-making, performance audit for quantifying levels of satisfaction, cost-centre budgeting for devolved financial responsibility and accountability). Given these changes, of image and substance, it then enables the gamesman manager to exert proactive influence on groups like funding committees and user communities to get support to induce change. Such change is made possible by the exercise of all ten competences (and probably many others). It is not possible using only the first five.

In consequence, the gamesman manager's applied knowledge domain will not be as static as that of the craftsman. In fact, it will be a highly dynamic model. This could be obtained in part if we were to interpolate a 'strategic' component into the original knowledge domain. But it would not be dynamic, continually redesignated concepts (like 'service' into 'contribution', and 'department' into 'cost centre', and 'user' into 'customer').

Accordingly, the domain may be represented as a 'gyre', that powerful symbol used by W B Yeats to represent historical change. Rather like a cone and a whirlpool at one and the same time, a gyre suggests that historical factors, events, personalities even, can move up and down the gyre in continuous motion. Up through the middle, galvanising the whole machine, are forces like revolution or, in this case, experiential energy. The structure works here as a way of representing ways in which factors like recruitment, getting the budget, and capital investment (not one of the original factors, but a very important one in this context as a universal enabler). Such factors, it is assumed, work normally

under conditions of entropy, ever folding down into lesser states, or states of greater disorder (or less effectiveness). The reader is referred to Figure 10.

The gyre stays in place because of the centripetal effect of experiential energy. This is a way of representing the paradigmatic and schematic coherence and co-inherence which characterises any rational programme of human thought and activity applied in an effective professional context. The boundaries of the column within which the gyre moves form the parameters of the situationally possible (ie the situational 'episteme', in Foucault's term).

Each area of management may be regarded as existing on the gyre, with a tendency through entropy to gravitate downwards. At any point in its descent, an area might turn from being 'enough' to being 'not enough', from 'good' to 'bad', 'real' to 'unreal'.

For instance, the level of junior management staff in a library might go below the critical mass for keeping the library open, the skills mix or activity portfolio of the library might reach a point at which adequate provision for users becomes impossible, the workloads on staff or demands on bookstock might become so great that a 'reasonable' satisfaction of user demand is unattainable.

At that point the area reaches a critical point, below which, for craftsman managers, it may travel ever downwards. For gamesman managers, the political unacceptability of this, and the belief that success can be brought about by change, entails that such areas, when they reach their critical points, are recognised for being no longer 'good' or 'real' (in terms of effective service to customers, effective operationalisation of professional energies), and induced to rise in the gyre again through the use of strategic manipulation.

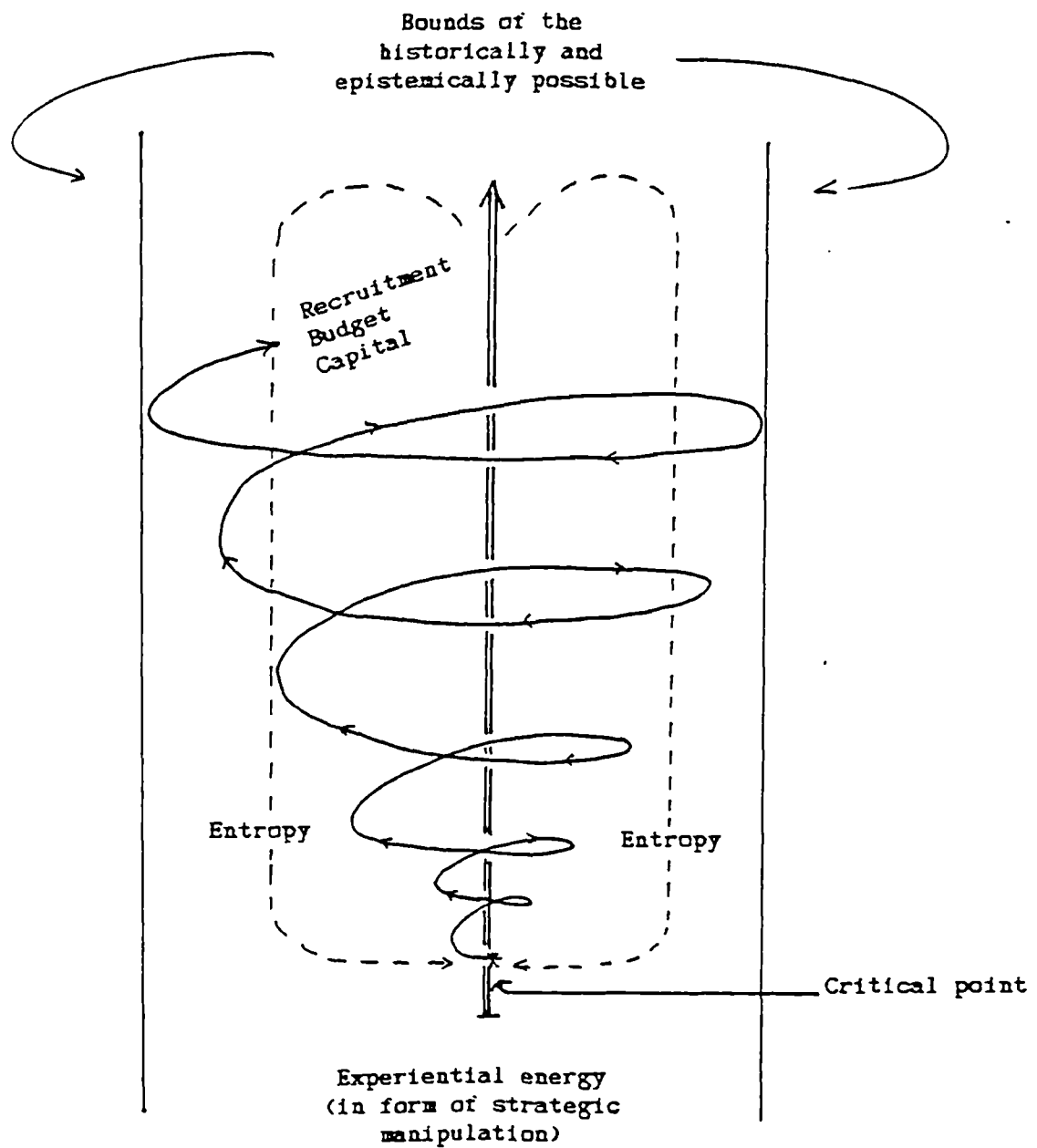


Figure 10 : Gyrac representation of managerial dynamic knowledge-handling

Figure 10 represents a gyre with three areas (recruitment, getting a budget, and capital investment) marked upon it. Metaphysical though the conception of the gyre is, it does enable us to represent the way in which, within situational constraints, the consensually and recurring professional dilemmas associated with 'being effective' can be, and are being, changed by gamesman experiential energy, through the use of an appropriately versatile and street-wise political battery of competences.

Further research would be needed to differentiate (a) the behaviour of different areas and (b) the levels of political acceptability at different stages of a the life of an organisation. A model is needed which incorporates another feature of critical importance: that of epistemic change.

For contemporary management, paradigmatic and ideological change is endemic. This means that what is true and regarded as true, and how these 'truths' are reified (in concepts, propositions and axioms, scripts and stories), work to define the boundaries of the gyre. It might be argued that, under paradigmatic change, the boundaries change, or widen, or get dislocated, or appear fuzzy, disorientating traditional practitioners, and allowing the circular movement of the gyre to spin sluggishly.

Under such conditions, areas sink entropically with greater speed and irrevocability. Under such conditions, too, the experiential energy is lessened or confused by the changing grounds of knowledge, value, and truth, so that what is 'real' and 'good' are harder to recognise or assert, and therefore redeem.

What storytellers regard as valuable lessons (the axiological dimension)

Stories often have morals. Indeed, the purpose of many stories (eg fables, allegories, and parables) is to communicate a moral. Morals here may be defined as general rules or inferences which we can elicit from a story (as we might draw rules from writers as diverse as La Rochefoucauld and Orwell, Oz and Kipling, Levi and Frances Hodgson Burnett, Bunyan and Wister). It suggests, too, that the process of induction, by which we infer a general rule from an instance, bound up tightly with this role of storying. In management, much has to be learned - in order to get on, obtain promotion, carry out particular tasks, be alert to peculiar work practices, know in advance how a boss might react. It may be self-serving, too, as we recall incidents where we succeeded and failed, why, and how we felt at the time.

Much of the time, too, these are incidents which we might not want to occur again. Or, if they do, we know, through reflecting on what happened first, that we should handle them differently. We have learned a 'lesson'. Martin (Martin & others, 1982) emphasises that the way in which particular managerial stories are believed and remembered is a sign of what importance employees in an organisation attach to the knowledge and experience embodied in them. A powerful story may become part of organisational culture because it encapsulates group or personal 'wisdom' about some event or procedure: it becomes a memorialising device, just as were the songlines of the Dreamtime, the legends of Beowulf, and the tales of the jongleurs.

Typical management stories hinge on situations which might be called 'enablements despite'. They recount a dilemma which could stop things in their tracks. They speak of how managers tried to get round them. Succeed or fail,

such managers learned lessons. There may be reasons why failure is not disclosed. Even if it is, lessons can still be cited as justifying the angst. To stress the value of lessons learned is to be effective. Peter Gummer is chairman of Shandwick, one of the largest PR groups in Britain. His story (Independent on Sunday, 7th April 1991, 20) is of a talk he did not prepare properly for, and the lessons afterwards (eg 'I cared more about what I wanted to say than they [the audience] wanted to hear', 'I didn't have enough material', and 'I wasn't flexible. I had no confidence in what I had to say, and so I couldn't adapt as the mood of the meeting changed').

Substantial research on 'events' and 'lessons' in management has been carried out by the Center for Creative Leadership in Greensboro, North Carolina. Research Report 32, by Lindsey and others (Lindsey & others, 1987) pinpoints key events in executives' lives. Nearly two hundred executives from six American corporations were surveyed and about half interviewed. They were asked about what they thought about their careers as managers, what had they learned from it, and whether certain events or episodes stood out in their minds. This generated a pool of descriptions of 'key events' and another of 'lessons learned from those events'. Co-occurrences and chi-square significances were determined, the emphasis being on 'where particular lessons were identified as being more important than others for a particular event'.

Events included developmental assignments like 'starting from scratch' (when a manager was thrown into something completely new) and 'fix-it' (where a manager had to use ingenuity to solve an intractable problem); hardships like business failures, missed promotions, poor subordinate performance, and personal trauma; other people, such as role models; and other significant events like getting management training.

Lindsey and others grouped the lessons, using methods based on grounded theory and inductive pattern-forming, into some thirty different classes. Among them were the following : ones which taught the manager to direct and motivate, gave them self-confidence, told them how a business worked, acquainted them with organisational politics, reminded them that their values might not be those of the company, taught them about their own limitations, or to find alternatives, or strategies for coping, or dealing with conflict, or using power.

A relevant example for library managers is when a manager makes a switch from line to staff, in other words, 'from line operations to corporate staff roles'. Often, changes of role, power, culture, and knowledge are entailed when such moves are made. Classically, in library management, this comes when a professional librarian, hitherto working in and defining himself with reference to a 'technical' domain (eg acquisitions, special collections, reader services, systems), is translated to generalist management roles through promotion (or by default, eg at times of crisis or down-sizing). The role and power changes introduce a new set of dynamics which are interesting enough. Here, of central importance is the paradigmatic and ideological shift. It has a close cognitive and behavioural similarity with the shift from craftsman to gamesman.

Lindsey and others define this shift as one to jobs which offer 'the advantage of high visibility coupled with challenge'. Such transitions often 'provide initiation into the world of corporate headquarters' and demand 'new skills and ways of thinking that are foreign to line managers'. Common core events identified here were (a) a new environment/ new ways of thinking, and (b) intellectually challenging/ demanding. The change is described thus (281):

'Learning that management is different from technical in terms of both requirements and challenges entails a shift in focus from individual task performance to managing people in order to accomplish a task. This category contains the recognition that people are key, that they can contribute either to accomplishments or roadblocks, and the realizations that management is a separate skill, that one must leave the nitty gritty of technical work behind, that technical competence is no longer enough, and that management requires reliance on and working through others.'

Major lessons learned from the switch were getting technical knowledge (eg strategic planning and finance), learning how the business works (holistically), discovering how to manage ambiguity and act in a turbulent context effectively, and learning what top executives are like and how they think. Further to this, Lindsey and others identified what lessons such managers had learned from *prior experience* that were most valuable to them at the time of the shift and afterwards. The most valuable prior experiences were their first supervision, their early work and what scope it had, and role models.

A mark of effective management is the ability to discriminate between things that matter and things that don't. This criterial process of referencing is particularly important when managers look at what happens to them and infer 'lessons' from the experience. It is an axiological act, concerned with the formal identification and examination of values and valuations, and, as such, provides us, along with the experiential (see above) and the deontic (see below), with one of the three crucial dimensions of reflective storytelling in management. We may argue that stories play a powerful axiological role for both tellers and audience in making sense of workplace experience, because they embody some of the pervasive meanings in organisational culture there.

Since storying is a process by which experiential meanings are reified in a widely available form of discourse (people need no formal training in order to tell or understand stories!); since stories give 'sense' to experience, give it the 'coherence' of which Carr spoke when discussing the role of the historian to explain and help readers understand; and since understanding stories entails both a search for 'coherence' and the act of 'inference': then it is reasonable to suggest that the inference of lessons, which indicate where valuable elements of experience can be found, elements which can be protended (projected operationally into the future for practical use), is a central part of an axiological approach to representing and understanding managerial experience.

So, in the managerial stories outlined earlier in this section (those of the new arrival from library school, how fairly people are treated at work, image and the professional, attitudes to information technology, and the fear of change), taken with the story-themes (and associated stories) provided later under the heading of success and failure (see above), it is possible to identify lessons which are both implicit and explicit. Implicit means that the existence of a lesson or lessons is inferrable from the text of a story. Explicit means that the writer or teller of the story overtly and deliberately (self-evaluatively, as we are to discuss later) points to a lesson or lessons learned from the recounted experience (which, in Lindsey's terminology, is called the 'event').

A typical story recorded during research sessions with students of library and information services concerns the first few months in a new appointment of a young qualified librarian. Up to that point, the criterion of effectiveness for the librarian has been made up of success in academic courses, meeting deadlines and standards for course-assessed work, and (implicitly) doing rather better than his peers (most of whom were the same age, ie early twenties).

Furthermore, many of the 'achievements' by which he measures his success have been based upon a complex set of beliefs about self-expression.

Adair (Adair, 1985, 15) (who quotes a young recently-graduated trainee manager on this) speaks of the transition from academic to business/workplace knowledge and value systems of such young managers. He vividly characterises the state as being between the 'us' and 'them', suspicious of 'manipulative management techniques'.

This leads to some interesting axiological findings. In the story of the new appointment, we find both implicit and explicit 'lessoning' at work. Implicit lessons can be inferred by the reader/researcher (and are tacitly signalled by the informant). Early in the narrative, the informant describes the encounter with an older member of staff (of the opposite sex and much older) over the use of an online terminal for searching a bibliographic database. The story is told in the first person, and the second character is anonymised as Ms X.

'...The next part of the introductory training programme was to learn about their database services... That morning I reported to Ms X whose domain it was. After a limp hand-shake, she rattled off what the main connect procedures were... She seemed to resent my questions... and, when I sat down at the terminal and told her that I had carried out searches like this at Library School, she said "Well, I expect you will know all about it then, and won't need me to tell you.".... I tried to make her see that that I didn't know it all...'

Narrative analysis reveals much here about the implicit agendas which were at work during the encounter, accepting the problem of misrepresentation (through tricks of memory, self-serving rationalisation, and the Hawthorne effect of the ethnographic researcher) (see stories in retrospect, below). In sentence three, his mention of Ms X's 'limp hand-shake' implies that he had noticed that she was not particularly pleased to see him.

If followed up, he would probably have rationalised this by attributing it to her being busy, a possibility associated with his description of her 'rattling off' the connect procedures. This description of her training manner is itself interesting, because it supplies a second lesson, that experienced practitioners do not always go at the pace of a beginner, and may in fact be poor or even reluctant mentors. His third lesson is that she resented his questions (which, in the full text, he describes as being 'simple' and 'reasonable' ones about Boolean searches with the operators 'and', 'or', and 'not').

Earlier in Part 4 it was suggested that in narrative, which often combines features of the 'fictional' and the 'expository', implicit (and explicit) comment like this may often be found in the expository parts. This will be developed further later when we examine the 'evaluative' elements of storying, using the Labov and Waletzky model, and argue that such evaluation is a crucial aspect of reflective storytelling. Here, we can say that much of the *implicit* comment takes the form of 'lessoning', and finds expression as much through tone as choice of text. Indeed, lessoning messages may be said to consist of both tone and text.

Explicit lessons are detectable too. He detects that she resents his questions : perhaps she would resent all questions and prefers to speak uninterrupted, perhaps it is his questions in particular which she resents. He has yet to work

that out. Perhaps, generalising inductively, such staff at such times should not be interrupted. He is trying to infer the rules of such occasions in the workplace. He is trying to infer *if there are rules like that*. Both these inferential activities are constructivistic attempts to understand the coherence of the story, a story personally vivid because he lived through it and is recreating it in his mind.

Another explicit lesson is that associated with the exchange 'I have done this before - Therefore you will not need my help'. The tone is important here, because the exchange does not operate on an entirely literal level. He does and does not know what to do. He knows that he knows some things but not specifics in this situation. He knows she knows this. On the other hand, she thinks he knows little about it. She is unsettled when she finds he does know some things. She knows that he knows that she knows that he knows this. In consequence, she gets sarcastic.

The lesson for him is compound : first, that he should not say that he had already 'done' it (the student's heresy!), and second, that he must anticipate reactions such as hers if he does. He mentions the exchange, selecting it as being relevant in his 'history' of events (explanation + understanding). We in our turn can fairly infer that this is an explicit lesson for him, which he has used inductively to this point, and will use inductively in the future (unless it is contradicted or superseded by new knowledge) and extrapolate to similar situations.

The lesson is explicit because he admits that 'I tried to make her see that I didn't know it all'. It is a tacit admission of failure. He acknowledges that the outcome had not been success, that the reaction and the attempt had led to an outcome (using Mandler's narrative analysis terminology (Mandler, 1978), as

applied before and re-applied below) which he saw as a lesson. Drawing back from the story, of which this part may be seen as an episode, he is able to draw a comprehensive lesson, along the lines suggested by Adair above, to the effect that the success of his first six months or so at work depended on his handling many episodes like this, and working hard to understand the lessons which arose from them.

Stories like this can be found, and analysed, for managers moving from technical to corporate positions (that 'line-to-staff' switch described by Lindsey and others), but an example of this is held back until later, by which time three other important aspects of managerial storytelling are discussed, the extent to which storying can be retrospective, draws on what we think should happen or should have happened (the 'deontic' dimension), and incorporates the metaphorical 'as if' first described by Vaihinger (Vaihinger, 1925) (see below).

Storytelling as retrospective knowledge representation

Kierkegaard is attributed with the remark that we live life forwards but understand it backwards. This sheds interesting light on storying. Storying occurs within a time frame. Often, as we have noticed, managers draw lessons from events, which entails looking 'back' at events with the wisdom of hindsight. Stories can often only be fully understood when we know how they end, what the outcome or eu-catastrophe or punch-line is. Indeed, full understanding comes only when we add 'a sense of ending' to 'a sense of story'.

In his phenomenological study of how we come to understand experience ('knowledge of the life-world'), Schutz (Schutz & Luckmann, 1974) suggests that

'we are conscious of an action only if we contemplate it as already over and done with'. Carr (Carr, 1986, 38) adds that, once the action begins, the goal is not just pictured but it is also 'wished for and protended'(ie we recognise the future arising from the present and we make ourselves ready for it). Carr goes on to say that this means that for the agent (in the story) the goal is in the future 'while at the same time ... it is pictured as the past'.

This is a key aspect of storytelling. In Weick's (Weick, 1969) words, 'It has to do with the proposition that sensemaking in general and goal-setting in particular are retrospective constructions instead of prospective inspirations.' Leaving goal-setting until later in the chapter, we may take up the view that stories help people make sense of experience *retrospectively*. This is partly due to the way in which narrative exists in time, and how the act of storytelling places narrative itself in time.

Ricoeur (Ricoeur, 1980) states that 'when someone, whether storyteller or historian, starts recounting, everything is already spread out in time. In this sense, narrative activity ... participates in the dissimulation both of historicity and, even more so, of the deeper levels of temporality. But at the same time, it implicitly states the truth of within-time-ness insofar as it possesses its own authenticity'. Even by creating a narrative feature like a 'plot', we 'symbolise events by mediating between their status as existants within time and their status as indicators of the historicity in which these events participate'.

For writers such as Ricoeur, then, even the simplest story, phenomenologically considered, 'escapes the ordinary notion of time conceived of as a series of instants succeeding one another along an abstract line oriented in a single direction'. Methodologically, the idea of using stories or 'life stories' in

sociological research is familiar (eg in studies of delinquency and deviancy, Faraday & Plummer, 1979). Such techniques allow for a display of the full display of the subjective reality of the informant, within the *Verstehen* (or empathy or intuition from within rather than observation from without) tradition.

Retrospective storying enables storytellers and audience to see experience, narratively mediated or not, in a *configurational* manner. This emphasise how wholes can be seen out of scattered parts. It is an approach which offers a 'synoptic vision' of our experience (Chaney, in Curran & others, 1977). For example, a plot allows us to review events and episodes configurationally. Mink (Mink, 1970) applies this term to the way in which we understand the complex imagery of a poem or 'the combination of motives, pressures, promises and principles which explain a Senator's vote'. In the manner, argued above, that any story is likely to consist of many ancillary elements (eg a manager's explicit narrative and any commentary, excuse-making, self-deprecation, admission that some substance consists of gossip, let alone what researchers may infer from any of these), configurational understanding will comprehend a story 'as a whole... connected by a network of overlapping descriptions'.

Configurational approaches to story may convert any plot into parable (if 'lessons' or axioms matter most), regard a story as generalisable-from (ie convert or deconstruct it into a script, from which other stories can be induced and inferred), or even use it to entertain. Moreover, it characterises 'expert' judgements on the experience which story represents, a view drawing variously on the notion that we look for consistency and compatibility in our experience of experience (Schutz, 1973) (Knight, 1955), and on the other notion, attributed to expert managers that events, states, and solutions can be recognised easily from practice and experience (the so-called 'aha!' situation).

Retrospectivity and configurational thinking in turn play important roles in reflecting upon managerial experience. This was first discussed in this thesis in Chapter 2, and underwrites the work of Kolb and Schon. Kolb (Kolb, 1984) stresses that 'experience is a molar concept describing the central process of human adaptation to the social and physical environment' integrating thinking, feeling, perceiving, and behaving (31). Shaped by many factors (eg psychological type, setting), growth and development successively integrates 'the self as a process-transacting [being] with the world'.

Schon (Schon, 1977, 1983, and 1987) emphasises the importance for professionals of reflecting on their work experience - the repertoires used to explain what happens, the appreciative system which they bring to problem solving, the overarching theories which they use to make sense of phenomena, and the role frames within which they set their tasks and through which they 'bound' (in the sense of bounded rationality) their organisational settings.

In his study of *The reflective practitioner* (Schon, 1983, 300), Schon differentiates between the expert and the reflective practitioner through a series of contrasts about what might be their 'sources of satisfaction and demands for competence'. While the expert might assert 'I am presumed to know, and must claim to do so, regardless of my own uncertainty', the reflective practitioner might say 'I am presumed to know, but I am not the only one in the situation to have relevant and important knowledge. My uncertainties may be the source of learning for me and for them'. Paradigmatic (knowledge) and ideological (belief-systems) aspects of this difference are important, added to which we have managers reflecting on their own knowledge and belief-systems.

Reflecting on one's work is common for managers. Reflective questions include 'What are my motives for going to work?', 'What happens in our department when

someone makes a mistake?', and 'How can I develop the courage to make my own decisions and take the consequences?' Reflection may review what kind of manager we think we are - authority-centred, participative, practical or an ideas-person, extravert, and so on. It often focuses on real or apparent successes and failures (since managerial success and self-esteem are regarded as important, and there is a close psychological connection between the two). It often plays an important part in storying, as storying does in reflective managerial behaviour. The reason for this may lie in the possibility that, as we live, we tell stories to ourselves about ourselves.

This is not only a sense-making activity, but, in being, innocently or self-servingly, self-dramatising, implies a kind of ontological problem, that reflective management or reflexivity provides for its own possibility when represented in narrative. This is to suggest that, when stories come into being, 'in our heads' or through our mouths, they begin to exist in their own right as representations, as extensions of their referential events and states. Phenomenologically, this is a direct parallel outcome to the effect on time which storying has as described by Ricoeur above: symbolically (or metaphorically, such stories mediate between the status of events as existants within time and their status as indicators of historicity in which those events participate.

The way in which retrospection and configurationality work together characterises not only this kind of storying but is reminiscent of what Carr stated about the role of history (as opposed, say, to that of annals). The contrast was in terms of richness and complexity of texture, and in the emphasis on understanding as well as explanation. A sense of an ending is an important element in reviewing the experiential and axiological significance of an event. The event may be someone's life, as in a student story about a

successful scholar-librarian who, through overwork, died shortly before retirement where the 'success' and 'failure' of the central character's attitudes and life are reviewed in relation to a larger - almost judgemental - criterion of 'effectiveness':

'I miss that man now. He used to be my own manager. He never saw his long-awaited retirement. He had spent many years planning for it, and forgoing holidays and leisure time, yet what good had his dedication served him? The collections of books and manuscripts are still in the library's keeping; within a few years his hard work will have been forgotten altogether. It is this which leads me to believe that leisure is such an important part of life... work should never reach the stage where it becomes all-important... Besides, the removal of paid employment in retirement removes one's importance and status. Lack of leisure interests means, in effect, that you have nothing to fall back on.'

A narrativistic approach to this issue is by way of the *hermeneutic circle*. This takes up the phenomenological notion that common-sense knowledge about society feeds back through social action (events and states) into the very way in which we think society works as a sociology of knowledge (Schutz, 1967). In Ricoeur's words (Ricoeur, in Reagan & Stewart, 1978, 144) 'a kind of circularity occurs between understanding a text and understanding oneself'.

The hermeneutic (or interpretative) circle is defined there in the following way : the understanding of a text 'cannot be an objective procedure in the sense of

scientific objectivity, but necessarily involves a precomprehension which expresses the way in which the reader has already understood himself and his world'. Admittedly, narrative analysis, as we have seen and shall see below, can contribute a great deal more than some of the Romantic connotations of the early part of this statement imply, but the broad emphasis offers useful insights.

In particular, mention of the *precomprehension* expressing the way in which 'the reader has already understood himself and his world' points directly to the way in which, through script (cognitive and behavioural) and story, the manager reflectively can understand his or her own managerial success. This process happens in time, aims at understanding rather than mere explanation, and is exteriorisable through ethnographic research. It draws on both *theoria* and *praxis*, academic and street knowledge, and suggests that, in creating and making efforts to understand managerial stories, managers, experts and novices alike, use a form of 'meta-storying' or meta-knowledge (Hannabuss, 1991). Some of the ways in which these ideas can be demonstrated will be reviewed.

The operation of a hermeneutic circle is usually unconscious and 'natural'. In 1991 a group of thirty-four first year students of library management were asked to discuss one of five views of work. Views ranged from the Protestant work ethic of work being uplifting to the Marxist view that work was founded on social and economic exploitation. Each discussion, in essay format, contained a story to 'demonstrate' or concretise the respondent's ideas about the actual workplace. These were analysed, categorised, and typical responses extracted. Typical of these stories is the following one, in which the hermeneutic circle is identified and briefly discussed. For ease of reference, paragraphs are numbered.

'...Before I came to study at RGIT I worked for Grampian Regional Council. I worked in a large open plan office, with little privacy. There was a lot of interaction between members of staff, although there was a tendency amongst everyone to pass responsibility on to someone else. [1]

The work was mainly of a clerical nature. What was so striking about the staff was that no one I spoke to liked their job. In fact there was a palpable despair about some men and women. What they all had, however, was a stoicism about their position.[2]

I recall hearing a typist, whom I had always assumed was reasonably contented, complain that it was not fair that she should spend so much of her time doing something she despised. The collective fantasy of the assessors department was derived from 'Neighbours' [the TV soap] and consisted of a comfortable semi in Australia.[3]

When this typist had finished describing her antipodean heaven and how she would love to leave her job tomorrow. Another typist just shrugged her shoulders and said 'You have to work, though'.[4]

And she was of course right. These people worked because they had to. But they also realised that it was not everything. In every society there will always be jobs that are glamorous and jobs that no one wants to do.[5]

School allows young people the opportunity to make something of their lives. Nobody is arbitrarily assigned a job from birth. It is up to everyone to forge the best future for themselves.[6]

If we accept that a hermeneutic circle involves a 'precomprehension which expresses the way in which the reader has already understood himself and the

world', and apply it to this story, making appropriate changes to reflect the fact that the 'reader' here is in fact the 'storyteller' who in his own past (which is being described in the storying) was a 'reader' of the original event (and who now as storyteller is being hermeneutically retrospective), then we are able to infer that his 'precomprehension' derived equally from (a) the viewpoint which he freely chose to represent in story form (that work is a necessary evil) and (b) the cognitive script which he had held in memory and regarded as relevant (experientially 'real' and axiologically 'lessoning') for this occasion. The occasion, moreover, is one of storying, in which the story is based on an event actually experienced by the storyteller and *re-experienced* by him in the re-telling. It is also vicariously experienced by his audience.

He has *already* understood himself in the frame of the story and in the frame of referential event which is the basis of the story. By looking back at the original event, he is able to reflect upon it and see it configurationally (as can be seen from the way he is able inductively to generalise about such employees in such workplaces) (paragraphs 5 and 6).

It was stated earlier that one of the role of organisational scripts was to provide prototypical knowledge for routine events and states. In the words of Gioia & Poole (Gioia & Poole, 1984) 'effective vehicles for understanding ... common organizational events' and specifying 'particular behavioral events that are expected in a given situation'. It has also been implied that representing experience in narrative has an effect on past events. But it might also be argued that turning experience into narrative *deliberately changes the relationship between experience and its routine accomplishment* (Chaney, in Curran & others, 1977, 446).

This important point not only illustrates the reflective practitioner at work, and suggests that storying is an important way of making sense of past experiences, but also has the effect of turning the 'routine' (which characterises scriptally experienced and remembered experience) into 'storied' experience. In such experience, the events and states become unique, if only in the way of recounting the tale. The message is conjointly 'It is special for me now' because I realise that 'It was more special for me then'. That is why I remembered it, and that is why I am telling you now. Why I even need to tell myself it now. And, since the retrospection is in part axiological, and since the act of storytelling is deliberative and self-revealing, much of this 'telling' will be organised in terms of success and failure, even if tacitly the failure is quietly omitted (unless it can be transformed into an appropriate and respectable lesson implying present wisdom from past mistakes).

We might represent the different factors at work diagrammatically in Figure 11. In this, past, present and future exist along a continuum and we can assume that the act of storytelling and the storyteller's consciousness exist in the present. The storyteller looks back to past events and states, understanding its lessons in the present by means of a hermeneutic circle, ie by using precomprehension. He is able to do this configurationally in a way he was entirely unable to do it in the past when the event was happening. Being in the present, he is able and motivated to look for lessons, which are configured in terms of success and failure (a failure to tell the difference being itself a failure).

Being in the present, also, and knowing that the future succeeds the present, the storyteller knows that what he does and thinks now is likely to affect what he does and thinks in the future. He knows this on the analogy of the relationship between the past and the present. He knows that he will understand

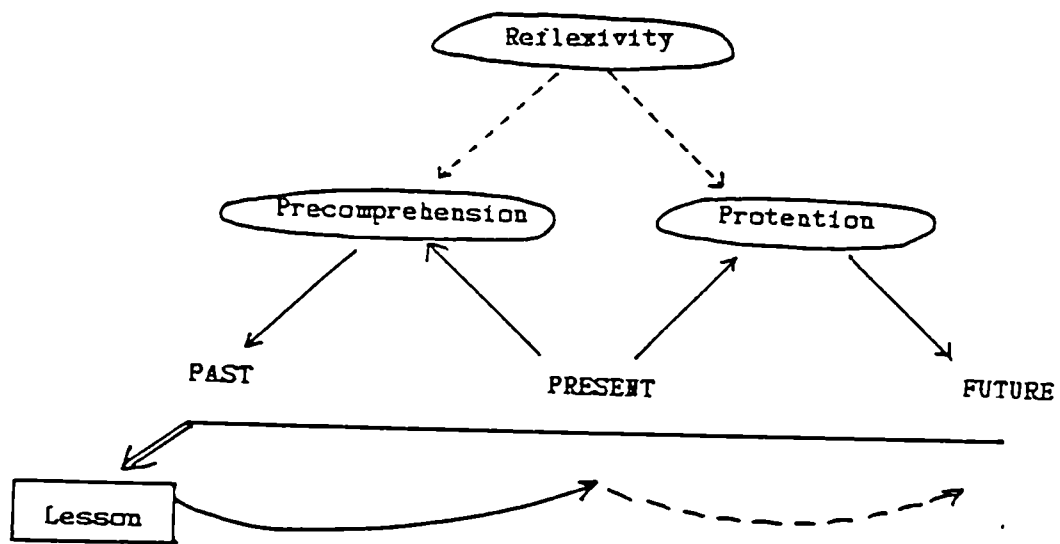


Figure 11 : Reflexivity and lessons and temporal sequence

the present in the future (for which it will be the past), just as now in the present he is trying to understand the past.

The lessons of the past will help him understand and control the future, particularly if the experiences are scriptally routinised. He knows, too, that he should stay open to the future (Carr's 'protentive') because events have both temporality and historicity. And so, from the present, he uses precomprehension to examine the past and protention to 'scry' the future, knowing that the lessons of the past will be enhanced or revised by those of the present for use in some form in the future. The use of precomprehension and protention are marks of reflexivity.

To this model we should add another important feature. It is implicit in looking axiologically at experience for lessons about success and failure. It is implicit also in what has been said about the historian's wish to understand and the phenomenological interpretation of experience. Storytellers and their audience do not simply look for successes and failures : they show an active use, in storying and responding to stories, of *negative and positive perceptual states*. Perception here is used with the meaning as in the statement 'some scientists were frequently perceived as competent but unimaginative' (Mitroff, 1974).

It is indeed Mitroff who applied this idea in his interviews of scientists involved in American space research in the early 1970s. He had differentiated between types of scientist and pinpointed how committed they were to particular points of view or hypotheses. The perceptions they had of each other and their scientific tasks were negative or positive. For Mitroff negative perceptions were such remarks as 'Edwards relishes the spectacular and has a craving for power', or 'Meade is more interested in the imaginativeness of his ideas than their truth'.

On the other hand, positive perceptions included remarks like 'Adams and Baker make people extremely mad but they also spur them on. They are on the creative vanguard' and 'Meade is interested in both the imaginativeness of his hypotheses and their truth, not just one or the other'. Mitroff emphasises how important sociological and psychological factors are in determining whether scientific ideas get accepted or not (Mitroff, 1974, 94-96).

In the student's story (above) negative perceptions are 'no one I spoke to liked their job' (para.2), 'The collective fantasy...Australia' (para.3), and 'These people worked because they had to' (para.5). Positive perceptions are 'they had, however, a stoicism about their position' (para.2) and 'But they also realised that it was not everything' (para.5). If the narrative analysis is fully to take account of both the axiological and the experiential, then the way in which valuational perceptions are interpolated by the storyteller is an important feature. In Figure 12 these negative and positive perceptions have been built into the model. The axiological dimension is characterised by lessons and negative/positive perceptions. Both then enter temporality and historicity by exerting an influence, retrospectively sanctioned, on the present (the point at which the storyteller is during the storying) and then the future.

What happens and what storytellers think should happen (the deontic dimension)

Storytelling is often an act of memory. There are times when we forget what actually happened, or supply what we think happened, or wanted to have happened. Like police witnesses, many distortions creep in, even if the original script of the narrative stays very much the same.

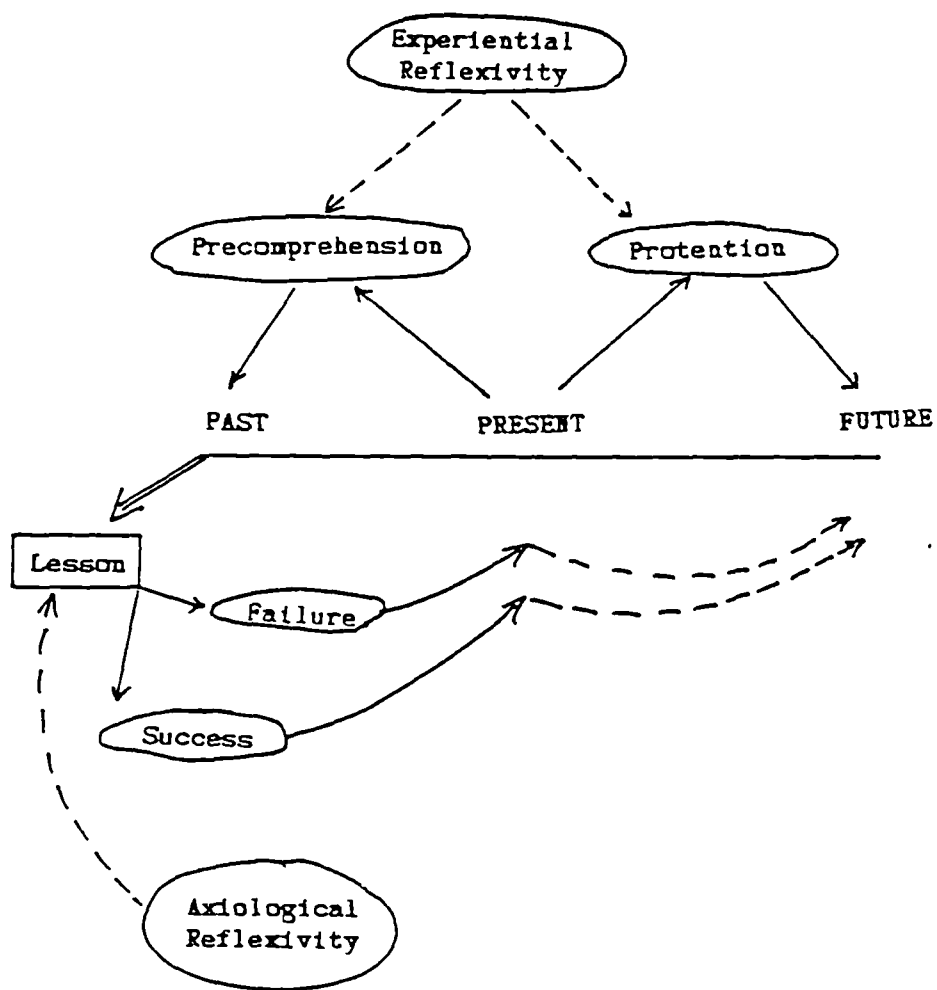


Figure 12 : Axiological (success/failure) lessoning

One of the roles for organisational scripts which Martin (Martin & others, 1982, 287) stress is that of helping people at work to anticipate what will happen, particularly if routine or recurring tasks, events, or states are the case. Arguably, if people get thrown when events turn out different, when cognitive dissonance is both high and unexpected, then we might call this a point where 'script-consistent predictions' appear to be threatened.

This is likely to occur at times of organisational change such as those described elsewhere (eg when technological or political change is swift and radical, or when managers move from technical to corporate positions). More generally, there will be many times when events or states are different from what people wanted or expected them to be.

The mismatch between what happens and what storytellers think should happen, or should have happened, is of particular relevance when we consider storytelling as a sense-making process enabling reflection, retrospection, and the elicitation of lessons. In management, too, the difference between success and failure, is widely pointed out, having a bearing on whether a manager is effective or not.

It may be that what happened does not bear thinking about, or is something which competitors must not learn. It may be that what was done reflected the use of professionally paradigmatic knowledge or was consistent with the ideological norms consensually agreed as desirable and feasible in such circumstances. It may be that the urge to tell it in story is self-rationalisation or self-serving, an *apologia pro vita sua*, that perennial trait of the autobiographer.

Carr (Carr, 1986, 32) refers to 'what ought to be the case' as the deontic domain of human reasoning. Deontology is a branch of ethics which inquires into the nature of moral duty and the rightness of actions (Bullock & Stallybrass, 1977, s.v.). It is applied to the principles of obligation and duty, those concerned with what men and women ought to do. Philosophically this is contrasted with a view that argues that the rightness of an action is determined by its consequences, a teleological view.

Here, *deontic* will be used to signify what managerial storytellers appear to think 'ought to be'. It is used in the context of the general discussion of storying as an experiential and axiological process, and is intended to form a third major dimension of storying.

Polanyi (Polanyi, 1981a & 1981b) rightly suggests that stories are often about the way it ought to be, or how unusual things were or are, or how it was compared with what we expected it to be:

'...People commonly say that it is worth telling a story about something "unusual"; the entirely normal and expected is not storyworthy. However, we often use these abnormal happenings as an opportunity to display our beliefs about the normal and expected; to display our command of those norms; and to instruct our listeners in what the norms are (or ought to be). We try to create a situation of "solidarity" with our hearers by rehearsing once again what we take to be a shared understanding about "life" in a particular regard.'

Many stories incorporating lessons learnt from failures, or bragging about successes, demonstrate the deontic deliberatively at work. The scriptal story about the orange and green security badges was one such.

The deontic draws equally on knowledge and belief-systems, suggesting that, in terms of the 'real', what happened was nothing like (or exactly like) what should have happened, or in terms of the valuable, what we did was much more of a lesson than what tradition and routine might have taught or encouraged us to do. The self-conscious (and often self-appointed) role of the storyteller encourages the deontic - in autobiographies for self-protection, in management to create whitened sepulchres (idealised products, scenarios, in which what the audience is thought most to want to see and hear is deliberately supplied).

An argument could be constructed to the effect that stories, being 'fictions', are especially suited to show 'what ought to be'. For instance, people ought to live happily ever after, good should win, and spies turn out to be heroes. Yet to do this so blatantly over-simplifies the complex roles and structures of the story that we should wish to distinguish between 'story' on the one hand, and 'storybook' on the other, storybook implying little more than a *deontic script*.

Typical of a deontic script in literature is the Horatio Alger motif of poor boy becoming rich man through diligence and a wealthy kind patron. Typical of a deontic script in management is where an obscure junior manager writes a report which, recognised as a work of genius, ensures his rapid ascent to the Board of Directors. Storybook deontics are little more than wish-fulfilment, commonplace in gratification fantasies and generic fiction (Cawelti, 1976).

It is not casuistry to turn this round and suggest that a 'storybook' view of experience is inherently of interest, because it is likely (a) to represent the knowledge of a naive storyteller or audience or both (and this is paradigmatically important, since naive knowledge is being displayed), and (b) to exploit the deontic implicitly or explicitly. Fairy tales achieve '(b)' overtly, as when wicked step-mothers die and princesses come back to life or win princes as husbands.

In the discussion below of expert and novice storying, the storybook factor will be integrated into narrative analysis. Comparison might be made with the discussion of the instantiation of managerial ideas in script and story components of the referential hierarchy. Indeed, the term 'storybook' appears first to have been used in this sense, about science, by Mitroff (Mitroff, 1974).

Yet it only takes a substantive elaboration of a deontic storybook structure to turn it into a full story. Often, such elaboration becomes a positive story. Wilkins (Wilkins, 1984) quotes one of these:

'... about how the current company president had made it to the top. The story goes back to the time when the president was an executive vice president in the company [ie already high up!]. The company faced a serious drop in orders due to a softening economy. The then-president had just left the company for a working vacation. The ambitious executive vice president took advantage of

this opportunity to fly to the distant board of directors meeting and offer te directors an ultimatum.

'... He announced that he had an offer in his pocket to become the president of a competitor, and he planned to accept the offer unless they made him the new president of the company. The board of directors took some time to discuss the ultimatum but eventually decided in favor of appointing the then-president to a special position on the board of directors and they installed the executive vice president as the new president'.

Neither need stories of an 'ideal' organisation be simple storybook deontics. Mitroff and Kilmann (Mitroff & Kilmann, in Pondy & Boje, 1980, 666-76, and elsewhere) examined stories managers tell. How the managers conformed to Jungian characterological types (combinations of sensing, thinking, feeling, and being intuitive) is discussed in chapter 4.

Mitroff and Kilmann found that managers of the same personality type told similar stories, ie 'they had the same concept of an ideal organization'. The concept of an ideal organisation is itself a deontic one, despite all the forms it might take. Mitroff (Mitroff, 1989, 48-64) developed these ideas by describing the ideal organisations for each type of manager.

Many stories predicate the thought that the organisation has an ideal alternative. This alternative may arise from the fact that, in the experiential world, employees often do not get what they want (pay, recognition, social benefits). This may be based upon a feeling that one is entitled to a fairer share of the breaks, is a subjective, impressionistic view of reality. On the other hand, it may be based upon a broader or more generalised conception of what is fair for all employees in such work. It then calls upon or invents general statements of 'truth' and 'fairness', such as 'All employees deserve an equitable salary' or 'No one should be treated like that at their age'. Both these act as deontic components in a narrative, against which the portrayal of the experiential is played.

Accordingly, 'good' managers or 'real' progress or 'effective' supervision are implicitly compared with often-barely-articulated but powerful intuitions about what ought to be. What actually happens is contrasted with what ought to have happened or what usually happens, each in its way an appeal to tradition, fair play, or self-interest. Mitroff and Kilmann's approach suggests that managers of different types tell different kinds of story about the ideal.

/ This was tested with ten middle managers in academic libraries. They were asked to write down, in about one hundred words, an anecdote showing how they had, in their view, been effective managers in recent weeks. The anecdote form was chosen for its ability, within very concise limits, to reflect many of the storying and ancillary characteristics of interest to the research. It was accepted that 'anecdotes' as such have a pejorative connotation (eg in the comment 'His talk was merely a collection of anecdotes', assuming that the personalised content of the anecdotes made

✓

them impossible to generalise from, and therefore of limited inductive value).

Of the ten anecdotes to emerge from informants, three were sensing-thinking, two were sensing-feeling, four were intuition-thinking, and one was intuition-feeling. All these ideas, used by Mitroff, and Mitroff and Kilmann, and drawing on the psychological categories of Jung, are introduced in Chapter 4 (to which the reader is now referred). Mitroff and Kilmann suggested that only sensing-feeling (SF) managers 'come closest to producing what one would truly call a "story"', but this view can be qualified, early on from this current evidence, when respondents supplied stories about effectiveness and these stories were analysed.

The most typical anecdote from each of the four categories was chosen for detailed analysis.

[TYPE 1: SENSING-THINKING MANAGER]

Such managers tend to be bureaucratic, orientated towards rules and roles in the organisation, and like certainty. They tend to be impersonal. The anecdote is quoted below, with the deontic statements underlined.

'...I like to run the library pretty efficiently, and I like to know what my staff are doing. Two weeks ago I had to see a junior member of staff about being away a lot. She did it without explanation, and other members of staff were feeling a bit exploited. I told her well in advance that I wanted to have a good talk with her about her time-keeping. That day I got the

office ready and cancelled all phone calls. She came in looking rather ashamed of herself, but tried to bluff it out. I made it clear things would have to improve. I listened to her point of view as well, of course. Since that time, she certainly has been more like the others.'

The script here is that of a boss interviewing a subordinate about discipline. The experiential content of the anecdote is consistent with this, giving a strong feeling of order and neatness in the workplace. Explicit deontic statements draw on an axiomatic knowledge at the start, while implicit deontic statements (eg doing things without explanation, it being implied this was wrong) suggest a powerful appeal to reason and fair play. These factors are very much seen through the eyes of storyteller.

It might be argued that the management style of such a manager are likely to increase the proportion of deontic statements in acts of storying such as this, and that sensing-thinking managers have a highly developed sense of the deontic in their storytelling.

The story has been structured in narrative so as to project the author as correct and competent, and his actions as the same. Throughout the sequence, he seeks to recruit the audience on to his side, implying that, if lessons were to be learned (and he himself had learned one from the experience), then being firm was it. Axiological components, like deontic ones, can be used as part of the narrative AND as devices to precondition to response of the audience.

[TYPE 2: INTUITION-THINKING MANAGER]

Such managers tend to be interested in general concepts and issues (eg they may be interested in efficiency in the abstract). They like task-orientated and team-based structures in which they think up new ideas. They share with ST managers an impersonal approach.

'...I had been concerned for some time about getting more PR [public relations] for the library. It is easy to get a stereotype of librarians. Research reveals this problem is widespread unfortunately. I sent a paper to the Librarian which set out what I thought was a realistic plan. There should be far more long-term work of this kind. I am glad to say that some of the ideas will be implemented. I believe that putting forward constructive proposals is important for the future of the library.'

The script is that of a middle manager making a suggestion and being pleased at its being accepted. Experientially it is storied in such a way as to allow us to understand the complexity of the situation, with PR getting poor box-office. The deontic elements are explicit (eg the argument for more work, more proposals) and implicit (eg that librarians are stereotyped, that good plans are realistic, and that the problem is unfortunately widespread). Again, they predicate an impressionistic sense of fair play along with kinds of axiomatic knowledge regarded by the storyteller as important.

The narrative uses a deliberative rhetoric of statement and example, both being addressed directly to the audience and asserting the claim to precondition their response to the story (eg it is implicit that to reject the truth value of some of the assertions is erroneous). The polemic tone applies not merely to the relationship between the past and the present, but to the future as well, as he recommends further proposals.

[TYPE 3: INTUITION-FEELING MANAGER]

Such managers like general themes and issues, too, but, instead of using impersonal and abstract ideas like intuition-thinking (NT) managers, they emphasise the personal and human goals of the organisation. They tend to dislike authoritarian management styles.

'...My idea of being effective is to be allowed to get on with things that matter. An example of this the other day was when I was called over to help a group of BA Honours students looking at abstracting tools. They weren't doing too well, but we soon got going together, and ideas began to fly about. It reminded me of my student days! I'm sure they'll get good marks, but, much more important, it shows how the library can make its contribution to the process of education.'

Scriptally this is simply a professional librarian helping a group of users. Experientially it fleshes out the script by saying that such users need often need help with complex information sources, and that he was good at

helping them. The deontic statements are both personal and impressionistic, serving to underwrite the personal style of the manager himself. His notion of being effective hinges on being free to use his professional creativity within, and for the benefit of, a worthwhile organisation. His anecdote exemplifies what in his view are the means and ends of being effective (ie being of value). The material is narrativised so as to reveal the experiential (the event and the state [of the storyteller persona as well as other participants]) and the deontic leading in and out of each other.

[TYPE 4: SENSING-FEELING MANAGER]

It is from this manager that Mitroff and Kilmann said that 'true' stories emanated. They are distrustful of mere theory and concern themselves with the interpersonal dynamics and environment of the people in the organisation. Such managers like to run realistic workplaces and create a good working atmosphere. The typical story elicited from research with librarians follows:

'...I know that routines must be done but I've often felt that non-professional library staff get a lot of the dogbody jobs. So I decided to ask them what they thought about their jobs, and check to see how much time they spent on what. The result was surprising... A lot could be shared round, and some of it didn't need to be done at all. Finding that out was valuable, but, better still, they know I care now, and that's real progress.'

The script, again, is simple : that of supervising staff at an issue desk in a library. Experientially this is a complex interpersonal matter, and, despite its concision, the anecdote reveals this well. The deontic statements tend exclusively to appeal to the personal and impressionistic, rather than the organisational (rationalistic, nomothetic) and axiomatic. All of them reflect the 'caring' approach characteristic of the personal style of this kind of manager. Many of them appeal to human qualities in the audience, and imply not merely a strong sense of what ought to take place and be felt in such situations, but also what people describing them (in stories or, a fortiori, in other forms) should say about them. It has been simply narrativised around the axiological point that the storyteller modestly but effectively has turned round staff attitudes by adopting a particular managerial approach to the situation.

Looking at all four stories, it is possible to summarise storytelling features thus: (a) experiential and deontic features function side by side, (b) a time frame of the 'past-present-future', with precomprehension and protention, is clearly visible, (c) storytellers reflect on the events and states of the experience and draw lessons from it, and (d) they structure the substance of the story and represent themselves in particular ways in the narrative.

In order to do this, they have clearly used deontic statements, explicitly and implicitly. Through these we get a view of what they think ought to be, or ought to have been, or what is unusual about what happened (and how it might and should be put right).

This draws on what they know and think, whether it is *axiomatic* (ie orientated mainly to the abstract or generalised knowledge or wisdom of paradigm or ideology) or *impressionistic* (ie based upon subjective and idiosyncratic assumptions which they believe they might, and often actually do, share with other people).

Since storying is a self-conscious and 'public' act (because storytellers know there is an audience, and often know their audience too), the way in which the material is converted into narrative (ie 'narrativised') is an important indicator, psychological and rhetorical, as to how the storytellers think about their material and what they think their audience will.

We might arrange the types of knowledge or wisdom on which the deontic statements in stories are based, using the story types supplied by Mitroff and Kilmann, in the form of the matrix in Table 37.

	axiomatic	impressionistic
organisational	ST	SF
personal	NT	NF

Table 37 : Matrix of axiomatic and impressionistic knowledge types

Whatever kind of deontic statement is used in such stories, it is important to position the use of the deontic as a whole in the model of storytelling. This model (see Figure 12) argues for the existence of a temporal continuum (of past-present-future) across which storytelling takes place, retrospectively using the precomprehension of the hermeneutic circle, and protentively into the future.

Many stories are retrospective and, being so, refer to events and states in the past from which experiencing which the storyteller claims to have inferred a lesson. Such a lesson can be one of success or failure, and the storyteller may often claim that, even if it is failure, he has learned successfully from it. The process of retrospective storytelling, then, has a strong axiological component.

We may now extend the model by adding the deontic dimension. Figure 13 represents the components of this model. It can be seen that the introduction of the deontic compels us to reconstruct the temporal continuum. It now becomes a parallelism, one plane experiential, the other deontic. Between them is exerted a dialectic which might be characterised as the dialectic between 'what is/was/will be' and 'what ought to be/have been/what is usual'. The axiological plays its established role, now directed at both planes of the parallelism. All three dimensions, the experiential, axiological, and deontic, all work reflectively, and are structured into narrative structures in storytelling.

It is important at this stage to make clear the domain of this activity. It is *within the sphere of one storyteller and his putative audience*. This domain may be called the domain of INTRA-STORYING. It should be contrasted with the wider domain of INTER-STORYING where a number of storytellers

represent their meanings of events and states, and where there are interesting factors of difference and consensus (Welbourne, 1986; Markova, 1982).

This intra-storying, consisting of one storyteller, since it contains the dialectic tension between the experiential and deontic planes, may be said to contain *negotiated meaning*. It is negotiated (Hannabuss, 1988a; Feuerstein, 1980; Markova, 1982; Kreidler & Kreidler, 1976) in the sense that meaning emerges from the interplay and mutual effect of at least two distinct shaping forces. Here these forces are the experiential and the deontic (see Figure 14).

Another important characteristic of the intra-storying model is that it is *collaborative*. It may seem a misnomer to suggest that collaboration can exist within a transactional area involving only one person, but it can be seen when we examine the procedure by which the experience, retrospectively considered and reflectively reviewed [Carr's historical understanding], and mediated through known discourse and narrative structures [Carr's historical structure being more than mere chronology], turns into a story.

Different aspects of the one storyteller, the precomprehensive and the protentive, 'argue' the story into existence. Much of the thought, like much of the ancillary material by which managers can turn scripts into stories, is tacit or hidden, and can only be partially inferred from narrative or expository prose. Nevertheless, it is suggested that a second dialectic operates between these two aspects of the storyteller, the precomprehensive and the protentive. In this process the experiential, axiological, and deontic dimensions are structural servants, forming intuitive and then objectively exteriorised components in the storying.

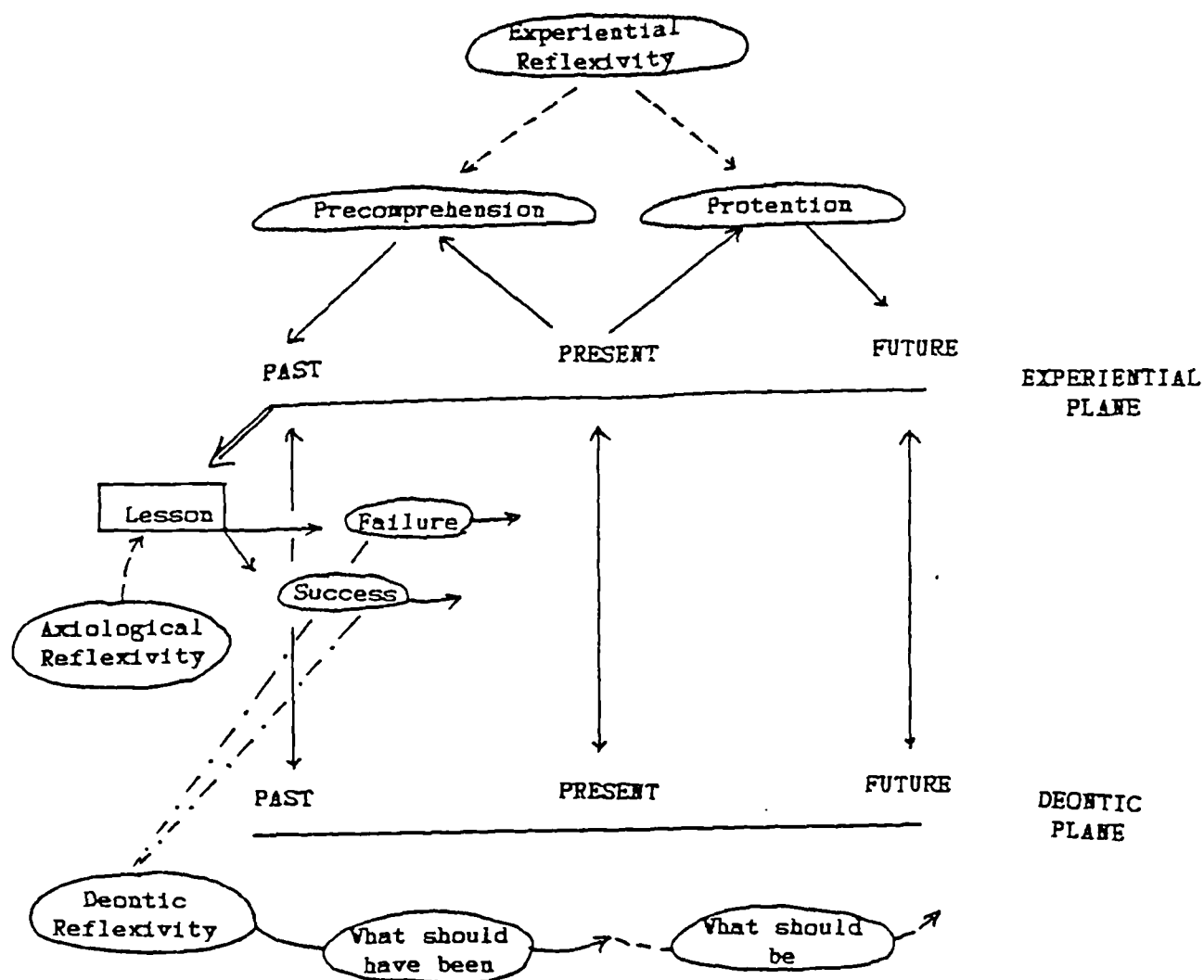


Figure 13 : Deontic aspects affect success/failure

Intra-storying then consists of the temporal parallelism, with its dialectic between the experiential and the deontic. It consists also of the second dialectic between the precomprehensive and protentive aspects of the storyteller. These features are represented in Figure 15.

It is, finally, possible to suggest that intra-storying is the *creative or cognitive precursor or progenitor* of storytelling itself. The progression from intra-storying to storytelling is achieved by way of the structuring effects of mediating intra-storying through narrative. This is described in Figure 15, where storytelling forms not only the narrative-mediated product of intra-storying, but gives its name to the whole process by which knowledge comes to be represented in prose discourse.

In the course of being instantiated in narrative, intra-storying adopts story forms familiar to the storyteller from childhood and sedimented through later years and experiences. Archetypal and generic patterns for narrative construction have been described when fairy tale typologies according to Bremond were explored and applied (see Chapter 10). There it was suggested that, in order to translate such structures across into management, they had to take on board the psychological complexity of the situation and the extent to which the storyteller is implicated in his own narrative. Arguments about experience, understanding, inferring lessons, and asserting how things should be, all confirm the tendency for storytellers to use stories for many purposes, not merely entertainment.

An important double strand in narrative is that between narrative itself and exposition. In many acts of storying (eg fables and parables), this mixture

makes itself present. This is so in managerial stories, too, which are often mixtures of narrative (eg the events and the states, the urge to keep the interest of your audience) and commentary or exposition (eg affirming what the lesson was from the events and states, or making axiomatic assertions).

Polanyi (Polanyi, 1981) calls that information in narrative or text which lies outside the events 'non-event information' and says that such information is cast in the form of 'durative/descriptive information'. Such information might contain information about things that always or usually happen (eg 'I always drink coke'), durative action (eg 'she is walking around and around with this can of water...'), description (eg 'the people there were really weird'), and things which do not occur (eg 'I did not order anything'). Polanyi's analysis concentrates on scripts and stories based on everyday experience in New York, but her ideas about a separate strand of text commenting on the main push of narrative is a 'good one.

It is taken further still by Labov and Waletzky (Labov & Waletzky, 1967) in their analyses of oral versions of personal experience. Naming the main body of the narrative the 'complication' which 'comprises a series of events which may be termed the ... complicating action', they argue that 'evaluation' is a crucial structural element of storytelling. For instance, in a story about an unhappy marriage, the complication (of how she was dressed and how he did not notice) is followed by the evaluation in which the storyteller says that 'Then she left a note one day [saying that] she was going to commit suicide because he was always raising hell about' her. After and only after the evaluation can we have the resolution, the result of the narrative.

The evaluation is defined as 'that part of the narrative which reveals the attitude of the narrator towards the narrative by emphasizing the relative importance of some narrative units compared to others'. They continue: 'An important characteristic of narratives is the degree of embedding of the evaluation in the narrative framework'. Typical is the direct statement, but it may be more implicit than that. Labov and Waletzky's narrative analysis is highly relevant to the kinds of storytelling examined here, because, although much of experiential dimension operates in the complication-resolution area of the narrative, the axiological and deontic certainly operate in the area of the evaluation.

Moreover, *the idea of evaluation suggests a process in which the storyteller monitors his own text as it unfolds, his own storytelling as it takes place, and these are typical characteristics of reflective storytelling.* Many of the deontic statements in the library managers' stories were evaluative in this sense and confirm not only that stories can contain both elements (narrative and exposition) but that storytelling quite easily and hospitably moves to and fro between the factual to fictional modes of presentation

Another aspect of storytelling which cannot be omitted is the extent to which people use stories for self-serving purposes. They might also rationalise what happened so that they find it easier to cope with difficulties, inconvenient facts or opinions, ambiguities and things they one did or said, or were alleged to have done or said, with which they do not wish to be associated. Martin (Martin & others, 1983) refers to these as 'self-enhancing... [where] Reputations and self-esteem are on the line'.

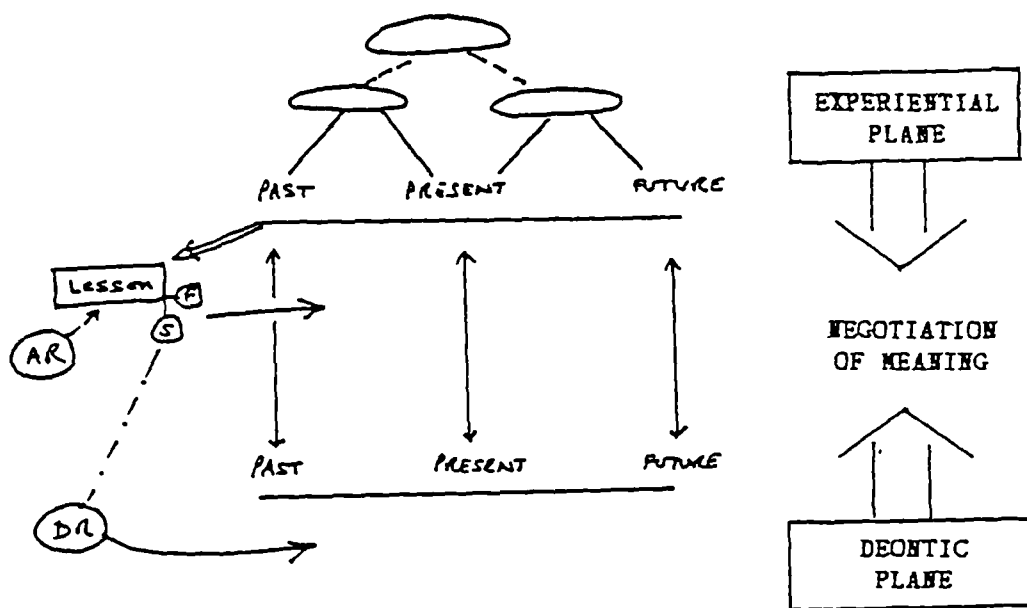


Figure 14 : Negotiation of meaning between experiential and deontic planes

Not surprisingly then, there is considerable evidence of a self-enhancing bias. Individuals often attribute causality for success to themselves personally, while blaming failure on external forces beyond their control. Martin classifies attributions in terms of responsibility, so that for successes storytellers claim a high responsibility, while for failure they claim a low responsibility.

Many middle managers interviewed through this research were keen to emphasise their own achievements. They claimed that they had obtained these through their own efforts, with minimal encouragement from their organisations, in the teeth of opposition (or indifference) from their colleagues, and in a climate hostile to any feelings of security and initiative. For such managers, storytelling was a kind of ego-trip, a self-serving autobiography.

It is all too easy for the researcher to slip into judgemental positions here, but we are reminded of the importance of the informants' meanings and knowledge, their perceptions, and the negotiated social reality which characterises not just management research like this but ethnographic research in general. In consequence, the notion of 'self-serving' here is used entirely without pejorative connotations, since ethnographically the kinds of filtering or mediation going on in storytelling are as valuable *epistemically* as any residual or underlying 'truth' associated, say, with what might actually have happened, in any objectively determinable sense, six months ago to X in organisation Y.

At the same time, many informants stress how 'success' had not necessarily led to promotion or recognition. This sheds light in its turn on the paradigmatic duality that was discovered between craftsman and gamesman

managers, and that role shift which took place when middle managers became senior managers. Criteria of 'success' (or of what makes up 'the effective manager') are multiform and protean, and rely on context (paradigmatic, ideological, organisation, situational, interpersonal) for definition. Even then, definitions have a provisionality, and remain contestable concepts (see Chapter 2).

These points may help us understand better how complex retrospection and the axiological dimension are in storytelling. Out of the dialectic, and bias, between the experiential and deontic in intra-storying, and as a result of how lessons of success and failure are used and portrayed, the storyteller goes no small way towards creating a self-serving discourse. Further research is required to assess the extent to which such discourses are ingenuous or ingenious.

There are, furthermore, important lessons to draw from the theory of cognitive dissonance (Festinger, 1957). Ross and Conway (Ross & Conway, in Sorrentino & Higgins, 1986, 122-44), in a paper on 'remembering one's own past', state that 'when people do not recognize a shift in attitude, they may revise their pasts in a manner that permits the new opinion to become an integral part of the self. They see the attitude as representative of their past feelings and reconstruct a behavioral history around it. As a consequence, the attitude becomes firmly anchored within the self-concept and resistant to change'.

This was found to be common in this research among middle managers in library and information services. Many implied that, when they started work, their professional views were naive and ill-informed, but that since then the effectiveness of their academic and 'street' (practitioner) knowledge

had greatly increased. A number took care to mention that, even before it was hegemonically regarded as plausible or desirable, they had steadily believed that a particular method of doing something worked (or did not). Instances hinged around the application or rejection of quantitative methods in decision making.

Many attributed particular ideas to themselves (eg 'I was the only one to raise it at the meeting...'). Often there was a conscious dissociation between them and their organisation, reflecting that difference explored between actual and ideal organisations, where the organisation was attributed with policies or characteristics with which they disagreed.

Anchoring within the self-concept an attitude bound up with past feelings, and constructing behavioral histories around it, are positions which tend to characterise the 'craftsman' manager at a time a profound paradigmatic or ideological change. Introduced as a major theme in Part 2, and implicit in the analysis of competences in chapter 5, ways in which different kinds of professional manager think of the role as managers is much affected by the locus of their self-concept and self-esteem. This may be the body of knowledge and wisdom associated with specialised professional skills, expertise, and attitudes ('the craftsman manager'), or with those more generalistic, 'corporate' and Realpolitik skills, expertise, and attitudes associated with 'the gamesman manager'.

The alternative to the situation described by Ross and Conway is one in which managers are less anchored in past selves and feelings, and 'see themselves adopting a new opinion. The perception of change should lead them to reconstruct past attitudes and behaviors that are at variance with their

new views. The opinion change may then be less firmly anchored within the self-concept and, as a consequence, may be inherently unstable. Such opinions are unlikely to persist unless they can be supported by subsequent changes in the environment or behavior' (Ross & Conway, loc.cit.).

The two positions may be summarised in the following way:

CRAFTSMAN-MANAGER	GAMESMAN-MANAGER
1. Things still same as before.	1. Things not same as before.
2. I (choose to) think and act now as I once did because it is important for me to think I was right then.	2. I am what I am, and what I once was must be consistent with now, even if I have to change my view of it.
3. I define myself as I always have. Any change should not undermine that.	3. I am always changing to suit the needs of the present and future.

Table 38 : Craftsman and gamesman manager anchor positions

These can now be represented in the 'experiential / axiological / deontic (EAD) / negotiation and collaboration intra-storying and storytelling' model. From among the stories provided by middle manager informants, it was possible to identify clear examples of craftsman and gamesman managers.

Earlier it was noted that for both types of storytelling the narrator will look precomprehensively from present back to past, move on experiential and deontic planes and use or work within their dialectic, look for lessons, and narrativise the whole act of intra-storying as storytelling.

Both craftsman-managers and gamesman-managers followed this pattern. At this stage of the research, twenty acts of storytelling were examined, from the ten respondents noted above, and from ten other respondents, identified and sampled and tested on identical empirical principles a year before.

Fifteen of these twenty stories conformed to craftsman, and five to gamesman, parameters. This proportion is not surprising in view of the views about competences discovered in the survey in Chapter 5. All respondents had been invited to describe what in their view it was like to be an effective manager. The stories given here were selected, after all stories were coded and pattern-matched, and structures analysed. They represent those which most clearly typify the differences between the two types of manager, in terms of knowledge and meaning, and ideology. For reasons of confidentiality, all respondents were anonymised alphabetically.

It is important to note how open respondents were, and how, in circumambient conversation with the researcher, twelve commented spontaneously on how nice it felt to be treated like an effective manager. They were clearly inferring that being asked about effectiveness implied that they were so. In knowledge

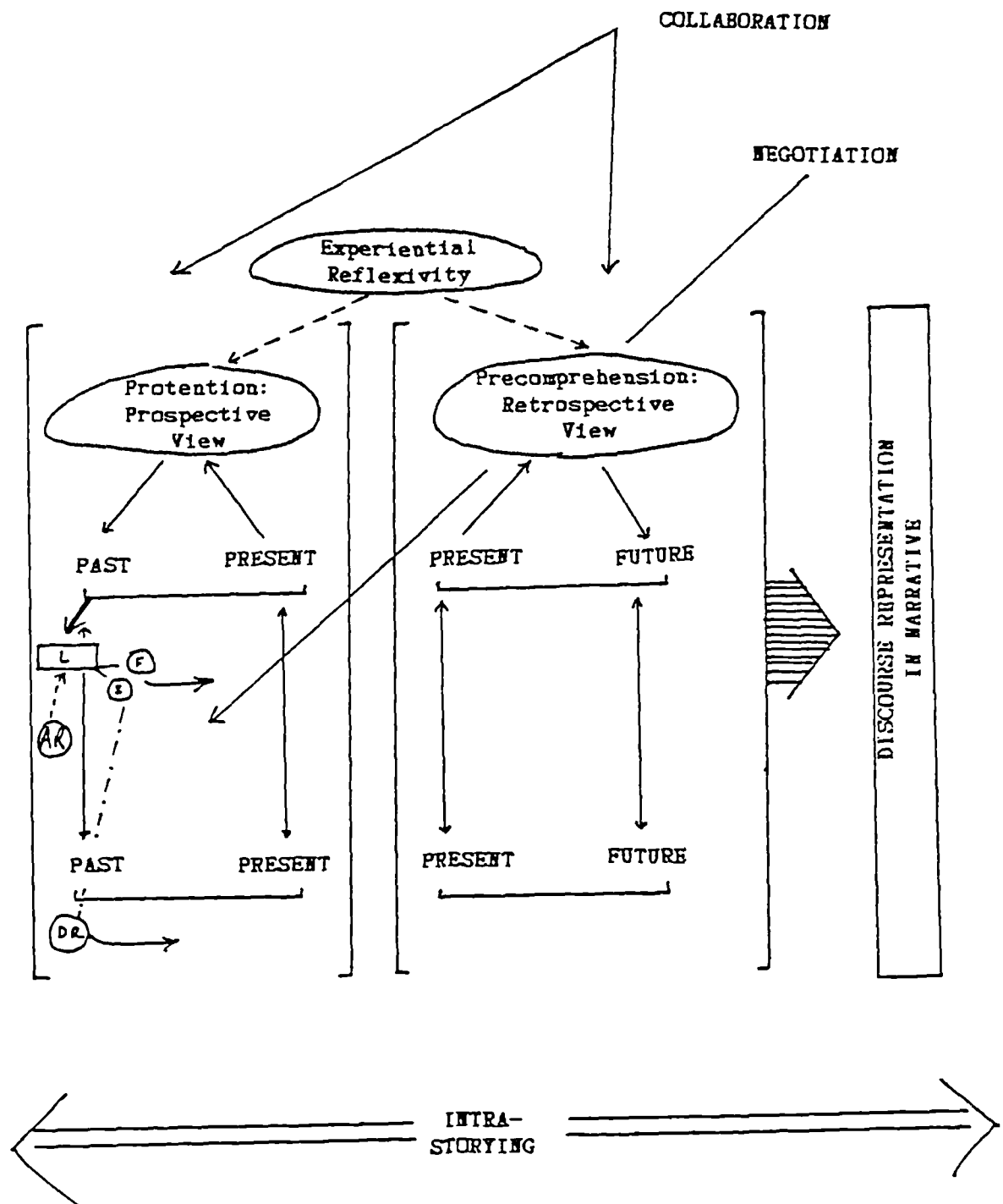


Figure 15 : Intra-storying model, with negotiation, collaboration, and instantiation in discourse

elicitation, given the bias of the Hawthorne effect, this tended to enhance the validity of the test.

STORY 1 : CRAFTSMAN-MANAGER STORYTELLING

Informant C was a woman working in middle management in an academic library. Her 'story' was based upon her daily work, and in particular on how she felt and hoped that she had her priorities right. Statements are coded by the EAD model according to dimension, and the story is explicated below.

'...I've been in this job nearly ten years. I never thought I'd be here this long [Implicit Deontic] but you settle in. You know how it is. All that time I've been working in this department. I got promoted five years ago to my present position...[Experiential / Setting]

During that time we have introduced automation. It has meant a great deal of work for everybody and especially for me. I had to learn how it worked, train junior staff, and then deal with all the complaints of the users.[Experiential /Complication 1] But, despite all the hassle, it was all worth it. I think! [Axiological] We didn't think so sometimes at the time... [Experiential] We learnt a lot [Axiological]. If we had to do it all again, I would allow more time [Axiological / Evaluation], but top management just told us to get on with it [Explicit Deontic]. We had six

months to get it up and running [Experiential / Implicit Deontic]. That certainly teaches you to work quickly [Experiential / Axiological] ...

But as I said it's all been worth it [Axiological]. I feel I know the system really well now, and only get involved when something really unusual comes up [Experiential / Evaluation + Resolution]. And that's what I mean I suppose by being 'effective'. Just doing the routines which you have to. Delegating the rest, but making sure people know what to do if you're not there [Experiential / Deontic / Evaluation + Resolution 1]....

And now there's all these planning meetings [Experiential / Complication 2]. They seem to be rewriting our job descriptions around us. I have twice the work I had two years ago [Implicit Deontic / Evaluation]. I wouldn't mind if it were what I knew about [Explicit Deontic / Evaluation]. But it's all sorts of policy things and I'm never sure what they really think at the top [Explicit Deontic / Evaluation]. I feel I'm working blind some of the time, a bit out of my depth [Explicit Deontic / Evaluation + Resolution 2].. When I feel really competent is when I think of what we've installed here and how the users really seem to be getting on with it happily [Experiential / Deontic / Resolution 1]...'.

With the assistance of Figure 16, we may observe what appears to be happening here. The storyteller, starting at the present, looks experientially back over the events and states, uses narrativising techniques like complication and resolution, and interpolates deontic statements as forms of evaluation in the text. She is inferring lessons out

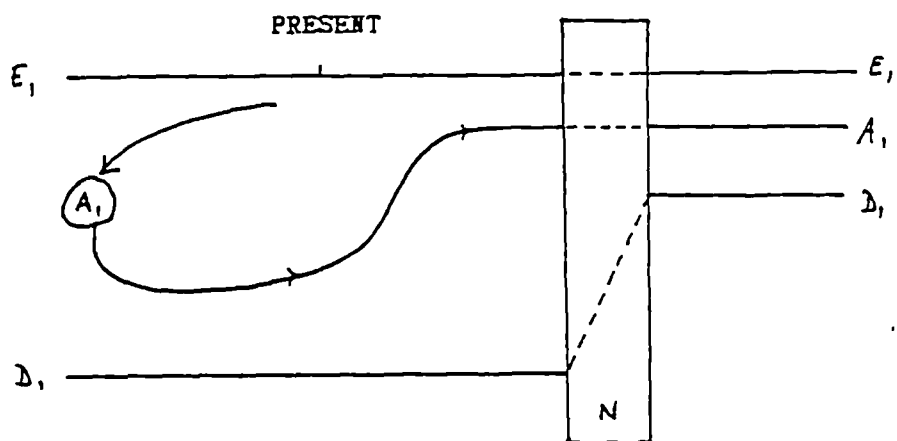
of her own experience as she tells the story because this is an important part of sense-making and communicating stories.

Because she is a craftsman-manager, she takes pride in those skills, expertise and attitudes associated with her job, which is specialist, technical, and non-corporate. This leads her to place very high valuation on these qualities, qualities which she has built up over the years and which she attributes to her former self as well as to her present self.

The experiential preconditions the deontic to the extent that the deontic is formed as a way of reinforcing the experiential. What ought to be is not very different from what has always been. Because of this (see Figure 16), the act of narrativisation may be said to refract the deontic towards the experiential in the way demonstrated. Such refraction, of course, implies the domination of one dimension (the refracting dimension) over the other (the refracted dimension). In this way, we may suggest that for the craftsman-manager there really is a tendency to define themselves as they always have and to resist change.

In the story itself, the existence of a second complication, introduced because 'they', 'top management', are doing things allegedly 'unfair' or 'unusual' underwrites this. Moreover, because the storyteller chooses to revert to resolution 1 at the very end, this signals her wish to find consolation in a eu-catastrophe (a happy ending) consistent with her perception of reality and her personal style.

CRAFTSMAN-MANAGER MODEL



E = Experiential

A = Axiological

D = Deontic

N = Narrativisation

Figure 16 : Experiential refracts (dominates) deontic in craftsman-manager model.

STORY 2 : GAMESMAN-MANAGER STORYTELLING

Informant L was a woman who ran an information unit in a company. Her 'story' dealt with an episode when the unit was told to introduce quality control standards by management. Again, statements are coded according to the EAD dimensions, and explicated with reference to the model.

'... Quality assurance and the implementation of British Standard 5750 had been sweeping through the company [Experiential / Setting]. It was essential if we wanted to stay in business in the North Sea oil industry [Explicit Deontic]. These standards should apply to every department in the company [Explicit Deontic], and so soon it was our turn...'

I first heard about it at a meeting with [-][the librarian's immediate superordinate] in the May [Experiential / Complication 1]. I thought at first that we would not be affected since I thought we were pretty efficient [Experiential / Implicit Deontic]. After all, knowing where to find things in a hurry is much of what being a librarian is all about [Implicit Deontic / Evaluation]. And we're able to find information in a hurry. We've got to do that a lot here [Explicit Deontic / Evaluation]. They want everything yesterday [Implicit Deontic / Axiological / Evaluation].

Then I read through all the bumf. We did most of it already but I went through it just the same [Experiential / Complication 1]. We had to be seen to be doing it [Explicit Deontic / Evaluation]. Doing it isn't ever enough here [Explicit Deontic / Evaluation]. After all, it's the way in business.

Supply or die [Axiological / Evaluation. I already used the internal network [the automated computer network containing company information, in which were held a database of library documents and financial information] so I was familiar with what they wanted. I knew they could look at what we did at any time of the day or night anyway! [Experiential / Complication 1 + Evaluation].

My policy here is to run the kind of information service which they cannot do without [Experiential / Deontic / Evaluation]. It's got to be done as cost-effectively as possible [Explicit Deontic / Evaluation]. I want them to be able to say : it's worth keeping the information unit! [Axiological / Explicit Deontic / Evaluation] So I reviewed everything we did in about two weeks and sent up a report to [-][Experiential / Resolution 1]... Recently the QA [quality assurance] people came round [Experiential / Complication 2] and we passed with flying colours [Axiological / Resolution 2]... But there's a lot more to do, because QA entails regular review [Experiential / Axiological / Deontic / Complication 3]. We'll be ready for them when they come [Experiential / Axiological / Implicit Deontic / Resolution 3]. If you want to know where I think I've been 'effective' this year, that's probably it! [Experiential / Axiological / Evaluation]...'

We may observe here , with reference to Figure 17, what appears to happen in this storytelling. The storyteller experientially goes back over the recent past, narrativises it using complication and resolution devices, and interpolates the deontic in regularly recurring moments of evaluation. She infers lessons from the events and states reviewed and told. As a gamesman-

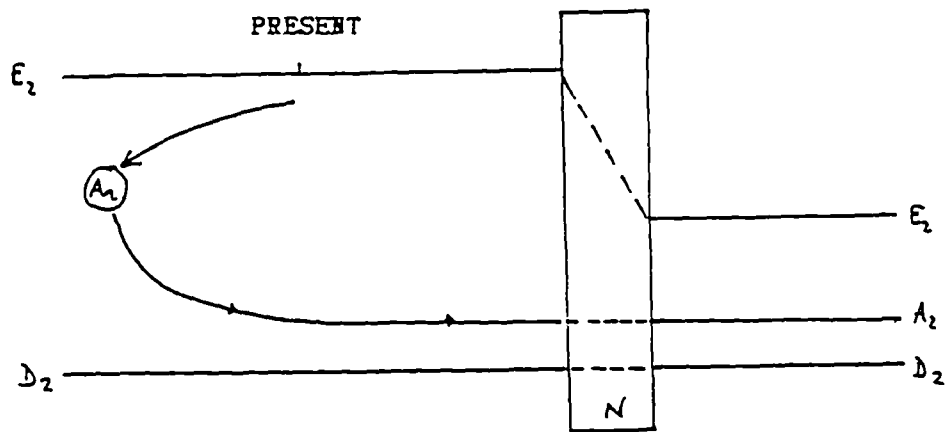
manager, her orientation is towards those skills, expertise, and attitudes associated with her success or failure in raising her profile in the generalistic domain of management in the company. Her professional technical skills are only a means to an end.

Accordingly, she places high value on political and organisation-handling skills, and reveals herself as a highly adaptive and reconstructive personality. Her portrayal of the past, and the past selves that are visible in the storytelling, suggest that she has successfully reconstituted any past skill or attitude to make it consistent with her view and position in the present. This is the 'story' she has chosen to tell herself and her audience. Because of this, the experiential dimension is refracted towards the deontic, because the experiential is reformulated as a way of representing the deontic (see Figure 17). The meta-storying position of the narrator is that she sees things this way, according to a dominant deontic, and retrospectively superimposes this on her past view of herself and her actions and attitudes.

Implicit in this whole argument is the problem of why the managers are different (apart from for idiosyncratic and personal reasons). It was suggested during an earlier part of this analysis of managerial stories (see above) that there were two managerial styles ('organisational' and 'personal') and two styles of knowledge or wisdom used in the workplace ('axiomatic' and 'impressionistic').

Figure 18 shows these represented in three dimensions when factors of the craftsman-manager and the gamesman-manager are added to them. We have found that managerial storytelling uses experiential, axiological, and deontic

GANESHAH-MANAGER MODEL



E = Experiential

A = Axiological

D = Deontic

N = Narrativisation

Figure 17 : Deontic refracts (dominates) experiential in gamesman manager model

dimensions widely, and that retrospection, reflection, and narrativisation characterise the process. Yet the two stories just analysed suggest that there are important differences between acts of storying.

The differences hinge upon the frame of reference of the storyteller. This in turn depends on the knowledge paradigm and ideological belief and value system within which, and with reference to which, the manager consciously or unconsciously chooses to represent his knowledge in story (or indeed any other) form. Chapters 1 and 2 explored the way in which meaning is a socially constructed reality, how management tended to recognise the limitations of the strictly rational, and developed that by suggesting that professions develop paradigms and ideologies, often contestably. Such meanings are negotiated and become the meaning of management (which itself is the management of meaning). Recapitulating the original argument is useful as a way of reminding us of the frame (macrocosmic [the general paradigms and so on] and microcosmic [the workplace, particular kinds of work]) within which managers represent meaning in stories.

Using Figure 18, we are able to examine a three-dimensional representation of the original matrix showing, under the discussion of 'ideal' managerial stories, two types of knowledge/wisdom (axiomatic and impressionistic) and two management styles (organisational and personal). To that matrix has been added a third dimension consisting of the two types of manager (craftsman and gamesman). Into this model the types of manager identified by Mitroff and Kilmann have been entered.

It is possible to 'explode' Figure 18 graphically in order to examine each pair of opposites in turn. First, in Figure 19, the model has been exploded laterally so as to separate by types of manager into craftsman and gamesman.

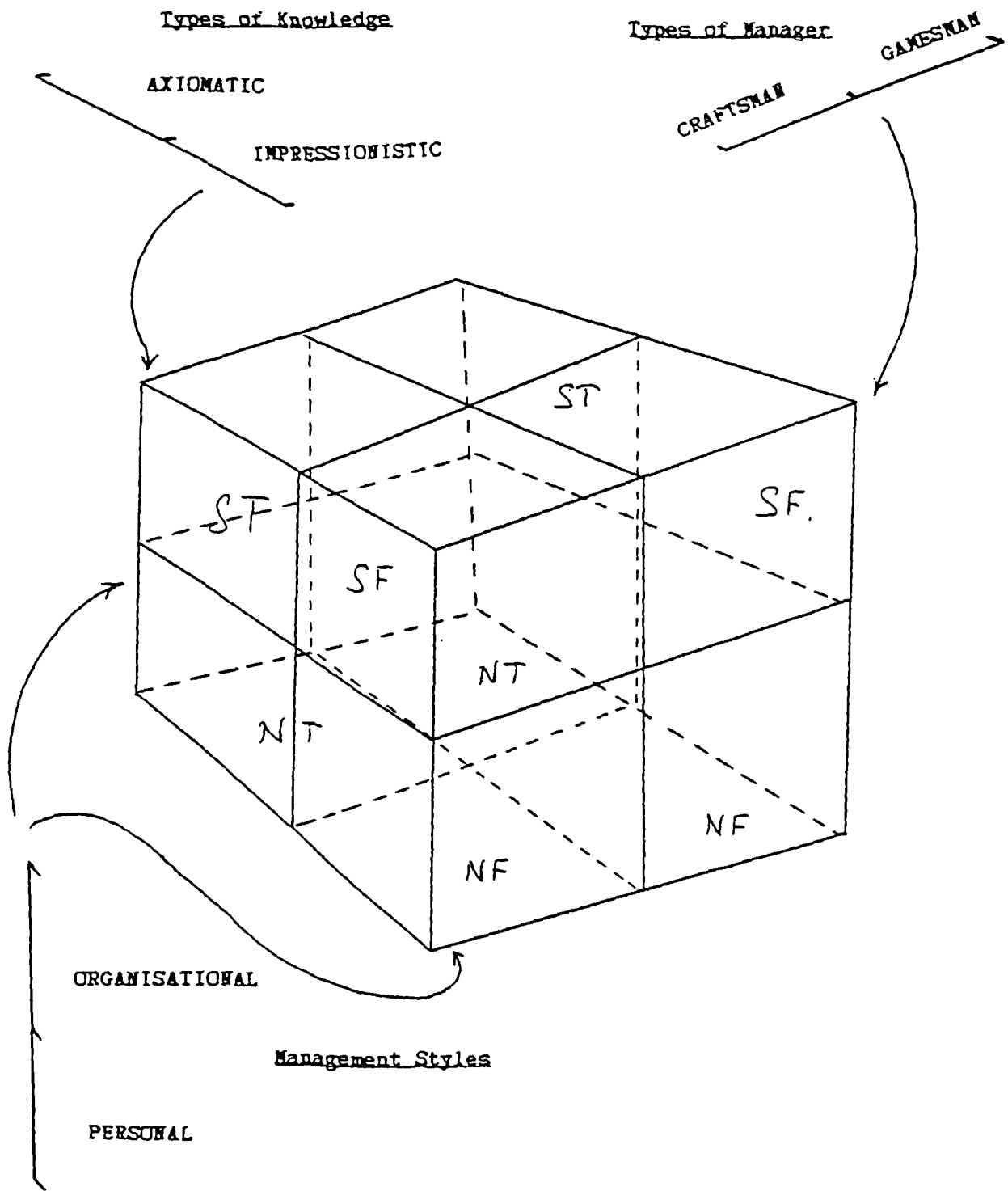


Figure 18 : Three-dimensional representation of Nitroff managerial types by types of knowledge and management styles

We can logically enter all four Mitroff types into both (i) and (ii) in Figure 19. This suggests that craftsman and gamesman managers can be found represented in all four Mitroff types, and that there is no substantive difference on grounds of types of manager.

In Figure 20 the model has been exploded across the 'depth' of its three-dimensionality (coming out at us, as it were) so as to separate by types of knowledge and wisdom, ie axiomatic and impressionistic. Again we can logically enter all four Mitroff types into both (i) and (ii) in the diagram. This again suggests that types of knowledge and wisdom can be found represented in all four Mitroff types, and that there is no substantive difference on grounds of types of knowledge and wisdom.

However, when we explode the figure by management styles (ie organisational and personal), as in Figure 21, (that is to say, separating the top 'slab' from the bottom 'slab' vertically), we are able to notice a substantive difference.

This difference is represented in (i) and (ii) in Figure 21. We notice that the 'organisational' style slab (i) contains exclusively those Mitroff types associated with 'sensing' (ie the sensing-thinking and sensing-feeling managers). Sensing was used by Jung to indicate how people take in information by way of their senses. Mitroff and Kilmann (Mitroff & Kilmann, in Leavitt, Pondy & Boje, 1980, 669) define sensing types as being comfortable with the specifics of a situation, with hard facts. Their thinking tends to be serialistic.

We notice, by contrast, that the 'personal' style slab (ii) in Figure 21 contains exclusively those Mitroff types associated with 'intuition' (ie the

DIVISION BY TYPES OF KNOWLEDGE

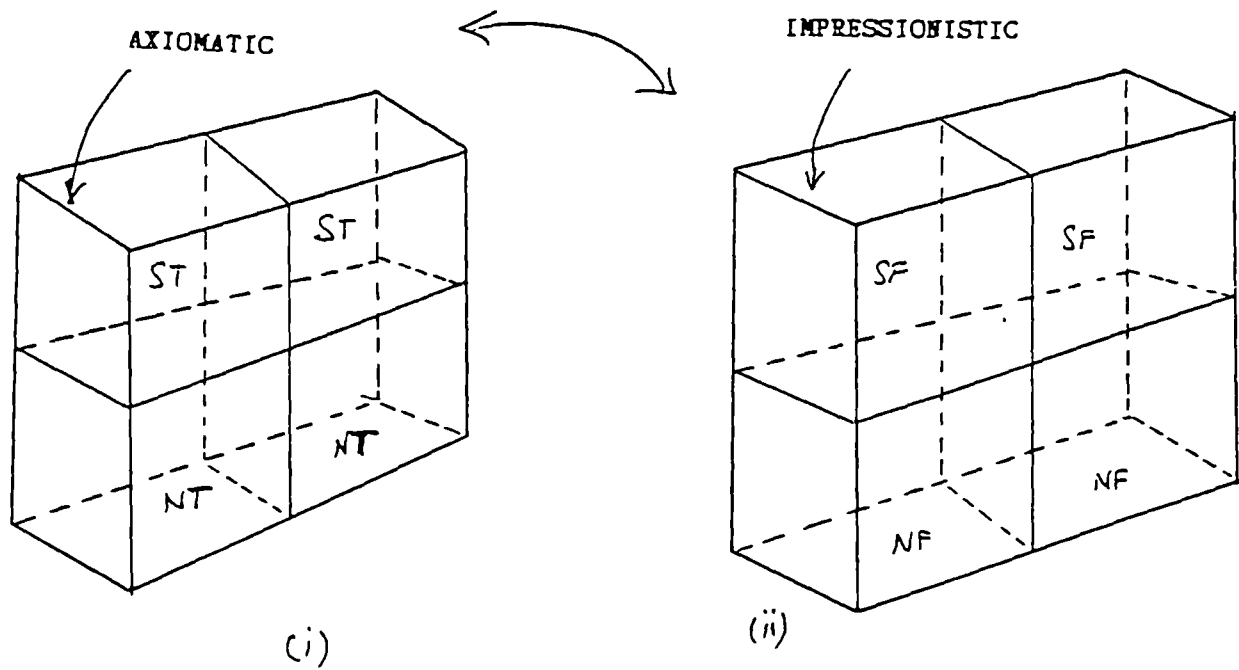


Figure 19 : Division of model by types of knowledge

DIVISION BY TYPES OF MANAGER

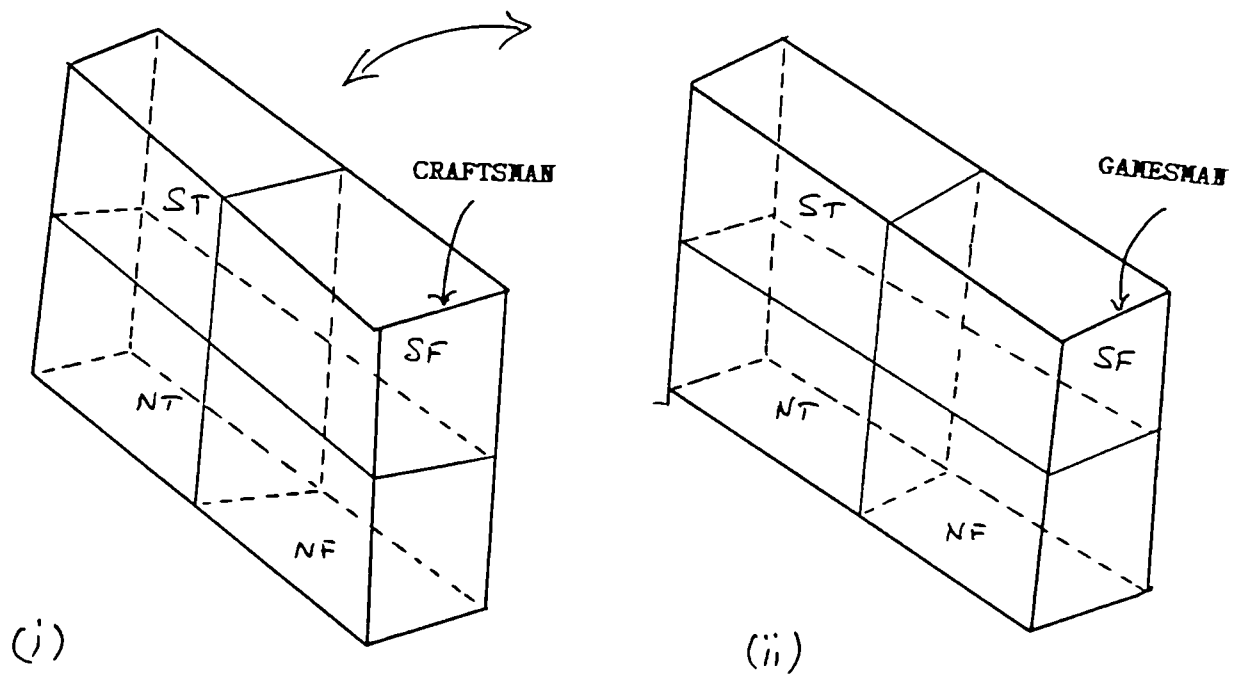


Figure 20 : Division of model by types of manager

DIVISION BY MANAGEMENT STYLES

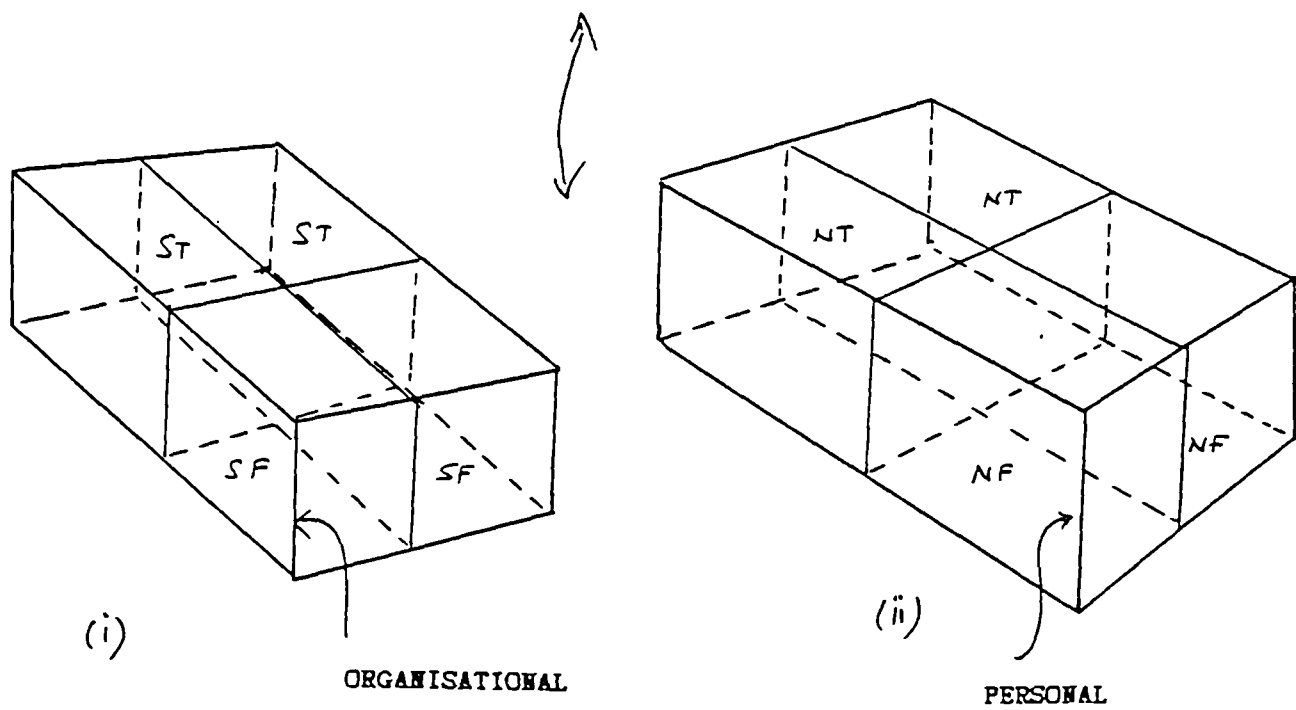


Figure 21 : Division of model by management styles

intuition-thinking and intuition-feeling managers). These tend to be holists, looking for the possibilities in a situation rather than getting 'constrained by details and an endless array of hard facts'.

Given this important difference, we are now able to take the argument one stage further still. It is possible to characterise the organisational management style as one where knowledge and values are heavily dependent on traditional knowledge and wisdom. In library management, partly because many organisations are large traditional structures with long-established service philosophies, and partly because much library work (up to middle management) is heavily dependent on mastery of detail and deployment of long-accreted expertise, there is a strong probability that, either by temperament or accustomisation, managers in library work will (a) define their knowledge and expertise in relation to detail and order, and (b) think or come to think serially (or convergently) about what they do.

This set of conditions, when instantiated in storytelling, shows itself in the ways in which the experiential refracts (ie dominates) the deontic in the manner described above. Such characteristics satisfy the definition of a craftsman-manager.

What is happening is that the such managers, when they think and think about thinking (in story-forms), *turn to the truths which they believe are warranted*. The idea of a warrant, which underpins the various forms of discourse (including storytelling) in which managers engage, providing them with meaningfulness and truthfulness, is, metaphorically, the notional tribunal to which managers appeal when they substantiate an argument or impression. Such warrants have been discussed earlier in the thesis, and are

a sign of the epistemic authority of a statement, a position, a contention, and explicitly and implicitly underwrite all the axiological and deontic features in storytelling.

We may suggest therefore that craftsman-managers working in libraries tend to turn to 'organisational warrants' in order to evaluate their experiences (that dialectic of 'negotiation' between the experiential and the deontic), and to infer lessons about themselves and their situation in the past, present, and future (the axiological).

There is a clear contrast between them and the gamesman-managers. In Figure 21 an attempt was made to show how a 'personal' management style drew off to itself those managers who were good at using, or thought it important to use, intuitive ways of managing. Whether this was done through a broad sense of what work and workers are for (intuitive-feeling) or through a focus on the specific interpersonal needs of people at work (intuitive-thinking) does not fundamentally matter.

Such a management style tended to emphasise holistic thinking (even when individual departments and employees were being considered), and, by looking for possibilities in the situation rather than getting bogged down in details, such managers may be regarded as intuitively seeking ways of doing things better or differently, or ways of doing other things.

It follows that such managers do not look for the knowledge and values exclusively to the organisational environment, although they know how important mastery of that organisational knowledge and culture is. They are highly conscious of what they need to know to pursue their own designs,

whether these are power or promotion or collegiality or fame outside the organisation. They master the environmental conditions so as to survive and manipulate them. They are also happy to move away from any prior self, any area of technical expertise with which they were associated in a lower post. This is an adaptive posture, not anchored rigidly to the norms of the organisation but anchored to their reflective interpretation of the organisation and their reflective interpretation of their own place in and outside it.

The deontic agenda of such managers reflects these postures, the professional expertise-centred 'what ought to be' of the craftsman-manager being replaced by the politician/generalist expertise-centred 'what ought to be' of the gamesman-manager. This highlights the different epistemological tribunals to which each kind of manager appeals (metaphorically) for warrants to underpin their actions, decisions, and interpretations (all of which, of course, find expression in storytelling). In other words, we notice that, for the gamesman manager, the deontic refracts (ie dominates) the experiential.

Key implications for this result are that such managers can ask themselves questions like 'Why do I want what I think I want?' and 'Can I get what I think I want?' and, cognitively and behaviourally, set about achieving them within the ambivalences and contestable social realities of the managerial context.

We may conclude from this that the gamesman-manager is better able to operate in a paradigm-free way than the craftsman-manager. The gamesman-manager is better able to move from paradigm to paradigm, a mastery of multi-paradigmacy characteristic of some (but not all!) managers, and from

ideology to ideology. Moreover, they are able to identify *hegemonistic paradigms and ideologies* and move in and out of them easily and opportunistically. Some of the implications of this, particularly for inter-storying and consensuality in storytelling, are explored in Chapter 12, and have already been theoretically flagged in Part 2 of the thesis.

The place of storytelling in organisational culture

Ricoeur once said that the role of stories is to *redescribe* reality. It is as if reality happens and then it is storied, a process described by Carr in speaking about history, action and time. Story appears to give action a shape which might not be the shape it originally or actually had. Self-serving storytelling confirms this. Indeed, the Swiss dramatist Max Frisch said once in an interview that he believed in everybody inventing his own story which he then pretended was his real life' (Gorner, 1991).

At the same time, we have noticed how often storytellers assert that something is real or true or relevantly recent, attributing epistemic authority, or its appearance, to the features of their story, and by extension to themselves as narrator. It is as it is, they tell us : 'believe me!'. Yet they are employing story to press home this truth, and stories have traditionally been associated with fictions.

It is as *if* it is. Vaihinger (Vaihinger, 1925) reconciles these two positions by suggesting that fictions have a provisional role to play : we use them until they are superseded. They are superseded by objective

knowledge, he says, a view corroborated by Mitroff's (Mitroff, 1974) conception of 'storybook' versions (say, of science), and confirmed by much research into the way in which children and students come to know academic subjects.

Vaihinger's view of 'as if' reality and representation, it may be argued, sheds light on the ways in which managers can encapsulate truths and mediate real-life dilemmas in and through stories, and at the same time escape from the rigid parameters of strictly factual and logical discourse. Doing this, managers, when they use stories, can move easily back and fro between expository and narrative modes, or complication-resolution and evaluation. Such movement is characteristic of reflective storytelling.

Yet there is still the dialectic between the experiential and the deontic. This is the cause of negotiated meaning in intra-storying. But how is this dialectic resolved by storytelling? What is there about using a symbolic form like a story that enables the known differences between what managers can do and what they think they should do to be represented in a unified form which everyone appears to accept as a way of representing meaning?

On the way towards an answer we need to take on board Vaihinger's notion of provisionality. We also need to consult the literature on ideologies (see Chapter 3) and the management of meaning (Part 2, particularly on organisational cultures, symbolism, myth and metaphor). Abravanel (Pondy, Frost, Morgan & Dandridge, 1983, 273-93) refers to 'mediatory myths' as

playing an important role at this stage, and, for the purposes of this argument, myths and stories are identified as being generically linked, both being ways of expressing management meaning in narrative formats.

Myths are symbolic methods of explanation, reflecting the mythopoeic style of thought 'which treats it as an expression of the unconscious' (Cohen, 1969), taking it well into the area of the phenomenological, the reflective, and that area of 'faith' or 'belief' where, in organisations, we find commitment, a sense of identity or community, and other powerful forces which can rarely be fully articulated through formal documentation or purely factual descriptions.

'Myths contain the capacity to organize human experience and enable it to be interpreted in a meaningful way. Myths affect consciousness both individually and collectively, forming a coherent basis for both individual and collective action' (Ingalls, 1976, 253). Joseph Campbell suggested that a main function of myth was to provide 'an interpretive image of the mystery [of experience] as it is known to contemporary consciousness in order to bring meaning to life' (Ingalls, 1976).

Pondy (Pondy, Frost, Morgan & Dandridge, 1983, 157-66) draws our attention to the importance of 'symbolic reality' in an organisation. He contrasts it with 'objective reality' (that 'set of empirical objects and events that constitute organizational action') and suggests that

'an objectivist analysis of organizations would assign only peripheral significance to organizational myths ... and would argue that a given situation admits only one objective reality and pattern of organization. But symbolic reality constitutes a patterned set of meanings, and is socially constructed by the actors in the situation...'.

The mythic, moreover, can encourage a meaningful and manageable fusion between the imaginative and the objective worlds (Chase, 1949, quoted by Bruner, 1979, 31).

For Abravanel such 'faith' can bridge contradictions which arise in ideological belief systems (eg an employee can hold that the library is there to serve the community but at the same time try to generate as much income as possible, like a commercial business). In the area of faith, myths can provide powerful creative energies: Ingalls (Ingalls, 1976) speaks of myths translated into reality when creative ideas held by individuals are converted into large companies like the 3M Company, Polaroid Corporation, or Xerox.

Myths can work powerfully against organisations, as when most people in a company believe that 'the lower people on the organisational ladder are the ones doing most of the work but have the least say and the least pay'.

Myths can also work in organisations to constrain deviancy. Conrad (Conrad, 1978), speaking of managers in education, refers to collegiality as a 'myth' which can be 'used by power brokers to mold apparent consensus and delegitimize deviants...', an important point for the way in which consensus can be created (eg about what managers should do in order to be considered effective), as well as for the way in which it reinforces the notion that to be so powerful ideologies have to be legitimated by the people in the organisation.

The mythic can also cover areas between formally recognised areas of knowledge (eg our knowledge of personnel management, our common sense knowledge about people in organisations, and what we do not know about either). This view derives from an analysis of the media by Silverstone (Silverstone, 1981, 81). Myths can actually replace reality from time to time, like Remington's romantic pictures of the Wild West, or the view that trade unions have a constraining effect on firms' employment growth (MacInnes & Sproull, 1988).

This part of the analysis of knowledge and meaning referred earlier to warrants and truth. In real life managers continually have to balance what can be done with what should be done. Externally, effectiveness may be regarded as being able to do this, and being seen to do it. Internally, effectiveness is all this *and* the ability, as recognised and reflected on by the practitioner.

Abravanel's view, then, that myth is indeed mediatory, between the achievable and the desirable, appears to hold much truth when we see that, in creating stories which play so many roles of external and internal importance, and which incorporate so many narrative and evaluative components, (above all an interplay between experiential, axiological and deontic dimensions, and between axiomatic and impressionistic knowledge), managers can represent important organisational cultural meanings which help them to reconcile the difference.

Storytelling organises historical action, and superimposes a shape, perhaps that of logical causality or thematic connectedness, on events and states. In being able to represent their struggle to become effective (by balancing the experiential and deontic in managerial reality) in a narrative reality, a symbolic reality which is not an opposite to objective reality (as Pondy says), managers show, to others and themselves, that they can manage meaning, and that is the meaning of management. Storying, based on storytelling and incorporating myths, has been shown as an appropriate and reliable vehicle for the expression of transmission of ideas and beliefs in management, both transitive and reflective.

Moreover, since storytelling is reflective and carried out before an audience, it is a major way in which managers can come to say that they believe that they are effective. In revealing this to themselves under research, as well as day-to-day empirical, conditions, managers themselves demonstrate how often they use storying to represent what they know and think.

SECTION 3 : MEANS AND ENDS, AND TRUTH IN STORYTELLING

It may be said that much of human life is goal-directed. Certainly much managerial activity is so. Goal-setting involves the creation of events and states which we want to have or feel. Against these we compare our present reality. This occurs in context, say, of work, where setting goals which we want may militate against goals other people set. Inside us, too, there may be antinomies or ambiguities which cause goal conflict.

The time-frame itself, within which storytelling and decision-making take place, cause us to look backwards and forwards (retrospection or precomprehension, and prospection or protention). The dialectic between the experiential and the deontic dimensions characterises that relationship, in goal-setting and goal-recognition, between events and states we have and feel, and events and states we want to have and feel. We look back, constructively and reconstructively, reflectively, in order to make sense of experience, and often infer or implant lessons : these we know we know in the present as a result of experience in the past and as a result of reflecting on that experience. That is the axiological part of the process.

Teleology and storytelling

Earlier chapters in this Part examined the ways in which narrative and causal structures were a crucial aspect both of representing experience in coherent forms of discourse, expository and narrative. The identification of

causalities and consequences, and choices between alternatives, characterised the process of decision-making discussed in Chapter 8. Implicit in these discussions was the assumption that managers, when they try to understand their experiences and plans, and exteriorise them, work within a structure of goal-setting and goal-recognition. After all, a goal set and achieved is an 'end' and the 'means' by which the end is achieved is worth remembering (and maybe using again) because success matters.

This suggests that the *teleological* should be the fourth important dimension in managerial storytelling. Philosophically, teleology concerns itself with the study of ends, goals, or purposes. It argues that 'events can only be explained, and that evaluation of anything (objects, states of affairs, acts, agents) can only be justified, by consideration of the ends towards which they are directed' (Bullock & Stallybrass, 1977, s.v.). As a generality, we might say that human beings are teleological because 'the quality and success of our life depends on whether the goals we have are chosen deliberately by us, or whether we have allowed others, or worse circumstances, to choose our goals for us' (Tice, 1990).

If we define the teleological approach as that approach which emphasises that '*things bring about certain goals, and that understanding actions this way makes them intelligible*', then it becomes logical to enrich the experiential-axiological-deontic (EAD) model. Since there is close association between what actually happens and how it is represented in the forms of discourse managers use, particularly in terms of the causal sequences (or events chains) by which many associations are examined in the time-framed reflection of management, then it is appropriate to interpolate the teleological into the EAD model, creating the ETAD model.

The theoretical nature and practical implications of this model will be examined in this section, and should be seen as (a) a development and application of the ideas in Chapter 8, (b) an extension of the model developed in section 2 of this present chapter, and (c) a stage in the overall argument towards the outline of a comprehensive statement on how knowledge is represented within paradigmatic and ideological contexts.

Teleological approaches are important for storytelling in view of the fact that stories are constructed and understood with reference to things that happen, that cause other things, and with reference to an understanding that we are in a position (narrativistically, chronologically, even ontologically) to view the causal sequence in some way. Stories are not the exclusive form within which this process occurs, since it can be seen in conversations, formal and informal, and in other styles of discourse (eg interrogations, law trials, reminiscence, and autobiography), but stories are the central focus in this present argument.

Describing teleological explanation, Boden (Boden, 1972) cites McDougall's view when she says that such explanation makes some 'purposive reference to possible future events..., to purposes or goals that are in some sense ultimate for or fundamental to the organism concerned', and includes aspects of subjectivity like consciousness or desire, and the 'postulation of a special form of mental energy'.

It is argued that these are criterial factors for the teleological approach, and we have already seen, in the EAD model, some aspects of them at work, in particular

(a) the way in which managerial storytellers make purposive reference to past, present and future events;

(b) the way in which there is an assumption that the events and states described matter routinely (if a script) and uniquely and idiosyncratically (if a story) to the narrator (and often the audience too);

(c) the way in which storytelling, because of its rich phenomenological and introspective nature, involves self-awareness and the awareness of the dialectic between what happens and what is desired; and

(d) the way in which this form of knowledge representation entails deliberate and reflective intellectual and imaginative energy.

The teleological approach, furthermore, is located, actually and in the minds of and to the knowledge of storytellers and audience, in a temporal sequence. This (as we discussed above) invokes complex resonances between events and time, and between what happens and the fidelity and meaning of our representations of what happens. Given retrospection, the wisdom of hindsight, rationalisation and self-serving explanations, as well as likely inferential activities serving to help us make decisions in the future, it is natural for the teleological to be closely bound up with the experiential on the one side, and the axiological and deontic on the other.

Narrative theory offers a further valuable insight, that using and understanding stories means the use of expectations - what we expect of the story, what we expect of the storyteller, what we expected in the past and how we choose to interpret it in the present, and what we expect our

expectations to be once we have told the story (for the act of storying or storytelling changes our expectations) (Champigny, 1977).

The time-frame is important in view of how, in storying and storytelling, narrators use retrospection and precomprehension, or prospection or protention, construct and understand the formed discourses. As Carr (Carr, 1986a, 40) says, 'the role of organising "backward" in time is to see clearly the various phases of the action which are the means to its realisation (seen by the agent rooted in the present)'. The idea of sense-making as an essentially retrospective activity was attributed earlier in the discussion to Weick (Weick, 1969), who suggested that 'goals are summarizing statements made by participants in organizations ... who thus make sense of what they have been doing. A goal is a seed around which to organize consistency and sensemaking'.

Given these two major ideas, that of goal-setting-recognition, and that of representing experience within a time-frame, they come together when we suggest that, in an effective model of managerial knowledge representation by way of storytelling, there should be a clear place for representing how the first (goals) occurs within the second (time-frame) and how each affects the other.

Furthermore, it should be possible to draw on the structural features of both narrative and the likelihoods in decision-making to achieve this. Narrative features have been described earlier, incrementally in several places, from the basic characteristics through analysis and applications (of such structures as Mandler's 'event-structure-development-reaction-goal path-outcome' and Omanson's causal-purposeful sequences of story events and

componential groupings of events and states for configurational understanding).

Decision-making (as described in Chapter 8) highlights the importance of deciding between alternatives on the grounds of likelihood. The decision-tree reflects those likelihoods attributed to known (and unknown) events and states, and something of its structure should be represented in the context of the ETAD storying approach. Finally, notice should be taken of how people think of events and states, what they call them, how they associate them one with another, and how they build them up into coherent semantic networks, ideas drawn ultimately from writers like Rumelhart, Schank, and Graesser , and discussed earlier in Chapter 10.

Action maze teleology and the EAD model of storytelling

Action mazes were introduced as a way of representing the different paths followed by managers through a knowledge domain. They were by stages information-decision-information-decision and so on, allowing for the use and display of knowledge in selecting alternatives, and suggesting that different path choices indicated differences in knowledge (eg between experts and novices). Structurally they are similar to decision-trees, lacking the probability attributions. Action mazes are also teleological to the extent that they diagrammatise the way in which 'things bring about certain goals'. The claim is that understanding actions this way makes them intelligible'.

Storytellers, when they are representing events and states in discourse, borrow the simple programme of 'beginning-middle-end' from natural storytelling through the ages. They also work within the causalities which experience has made familiar to them, and within the time-frame which has taught them the behaviour of actions, consequences, and the ways of contingency. The storyteller exists in the present, knows what he knows about the past, and has plausible ideas about the future.

In making sense of experience, therefore, he needs to fix upon points at which causal sequences start. Those in the past will 'finish' in the present (in the sense that, at the point of telling, the achievement of a goal, or not, will have been recognised, even if only provisionally). It is said that every story needs to have a 'point' and this meaning is something between a purpose and a punchline. Yet stories need to have other points, in particular *a point of departure, a 'terminus a quo', a distinct and definable place where a particular narrative begins*. It might be that a storyteller decides to start where he recalls 'the thread'. On the other hand he might decide to start at a precise point, eg when his supervisor asked him to come into her office, or when the computer crashed, or when he first heard that appraisal schemes were being introduced.

Within the experiential and pragmatic context of work, and how managers think about work, such points are numerous, starting off narratives which may be routine or eccentric, and some of which may develop into nothing. The assumption is that a storyteller will look for the interesting or the relevant in his storytelling, aware though he is of the many stories that exist (and opportunities to 'story' the experiential events and states).

More focussed still, within the individual story itself, there will be twists and turns in the narrative, alternatives which agents in the story could have done and did, or but did not, conflictual relationships between different agents in the same story. All these will be viewed from the present looking back, from the outcome or resolution looking back over the development or complication of the narrative.

Because they are being viewed, shaped, storied, on a meta-storying or meta-knowledge level, the storyteller himself knows he can avail himself of a number of alternative rhetorical and plotting devices to unfold the narrative. Unless it is a story 'against oneself', it is possible that on this level the success lesson or coincidence of experiential with deontic will prevail with the machiavellian manager (based on inferences from the ways in which for gamesman managers the deontic refracts the experiential: see section 2).

{ A way then needs to be found to integrate the action maze into the EAD model. Reminding ourselves of this model briefly, it argued that, from a position in the present, the manager looks to the past experientially, identifies a point (there will be many, but he is looking for a relevant point, eg where a story relevant to his search for understanding or to his need for self-justification can realistically start). It is there that the story begins and where the axiological meaning of the story and the storytelling starts. It is reviewed constructivistically, reflectively, and moves causally and temporally back to the present.

In various ways, and for various reasons (one major one being what type of manager, craftsman or gamesman, the storyteller happens to be), the deontic dimension (about what should have happened, or what the storyteller would

prefer to have happened) exerts an influence on the experiential. Either may dominate (see section 2). The negotiation of meaning occurs in this intra-storying between the experiential and deontic dimensions, while the 'dialogue' between the past and present viewpoints (alter egos of the narrator) in the collaborative aspect of the reflective storytelling.

Without a strong sense of the teleological, the EAD model would be imperfect. In consciously ordering events causally and temporally, the storyteller acknowledges the teleological. He selects between one story and another, between choices within stories, between ways of describing choices within stories, all teleological activities in view of the fact that these activities are being carried out retrospectively, because the manager is trying to understand the actions in terms of goal-setting and goal-recognition. The analogy of the detective novel is pertinent here.

The teleological approach can be adopted to structure and explain the future as well as the past. Weick's view that sense-making is essentially a retrospective activity is partial. Sense-making is about the future too. The present, where the storyteller exists, looking back, is also a point from which he can look forward. In fact, arguably, effective managers will not only look forward to review what has happened but look forward to plan and goal-set for what is about to happen. After all, they hope to influence the future by and through their decisions, and look at and to the future with an eye on what is likely, desirable, and plausible. These all imply dimensions (like the deontic) or issues (like what managers regard as probable) discussed before.

Because of this, therefore, it is important to build into the EAD model the presupposition that the present is

(a) where, through retrospective review, the storyteller can identify a past POINT at which a causal and temporal sequence starts;

(b) where GOAL-RECOGNITION of the past sequence occurs; and

(c) where a new start is made for another, prospective causal and temporal sequence stretching into the future, with its own set of dimensions and likelihoods, and its own goal-recognition point.

This is represented in Figure 22. As a result of the interpolation of teleological features, retrospective and prospective, into the EAD model, we are able greatly to expand the structure of the story embedded in the backward loop. First, we can represent the existence of several possible stories, each of which the storyteller might use to tell the story, and the one which was in fact used. Then we can represent the different paths through the chosen story, with different outcomes. It is probable that one path and one outcome dominate, and it is there and from that that the axiological momentum starts (ie it is there that the storyteller decides to serve as the foundation for a lesson, or 'the moral of the story'). This may be success or successfully-acknowledge failure or failure. Admission of this, within the context of the story and the storytelling, brings us back to the present.

A similar set of events can be devised for the future, where the manager will have some idea of the events, choices, and outcomes, and where the experiential and deontic dimensions will again play a large role. Both past and future ventures will be structured in teleological ways in order to make them intelligible to both storyteller and audience.

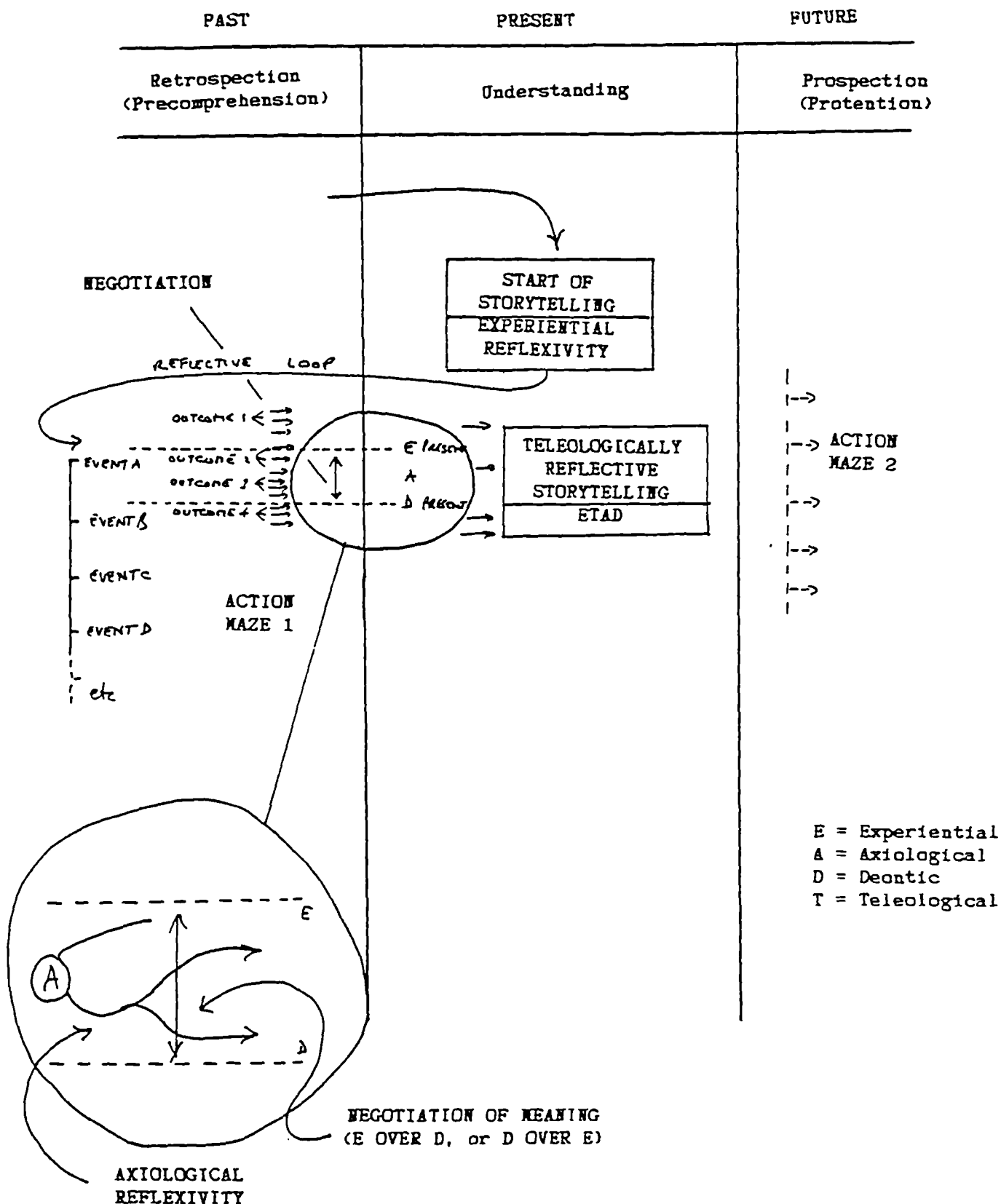


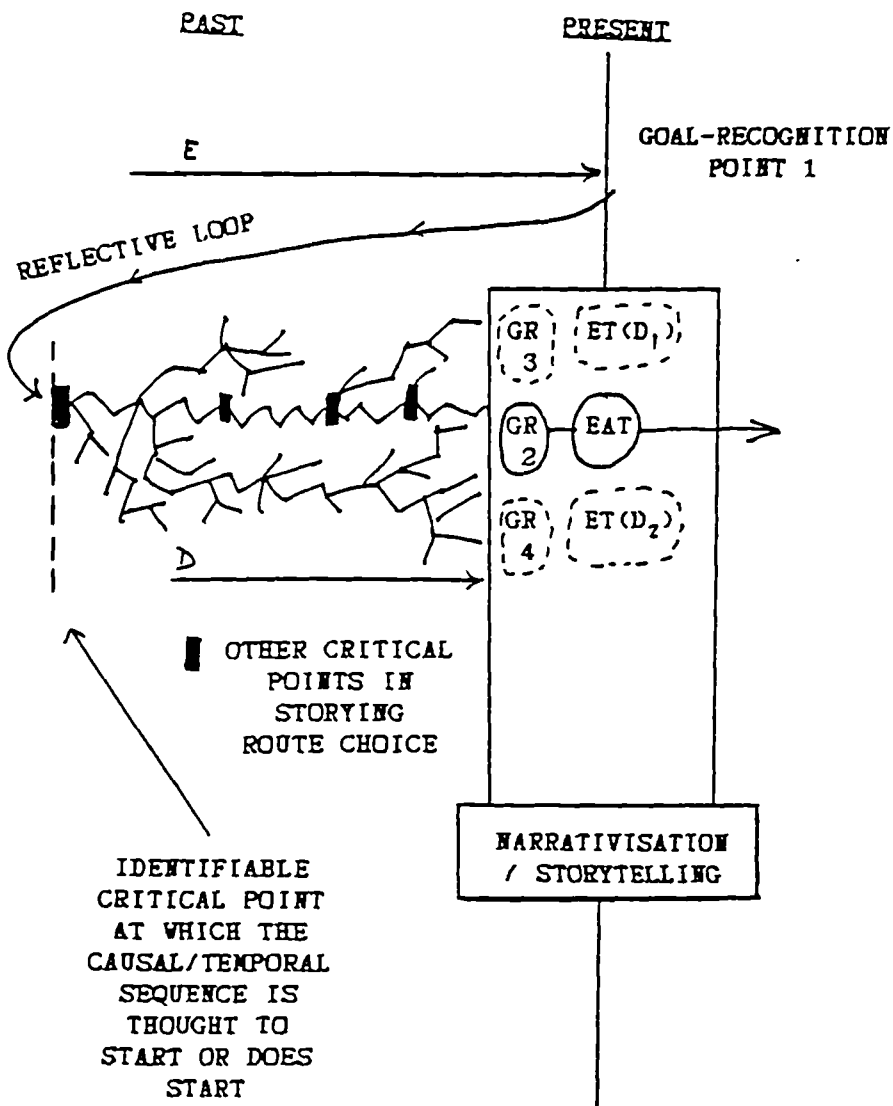
Figure 22 : Action maze teleology built into RAD model to demonstrate ETAD model of storytelling

Figure 23 extends the information available by concentrating on the retrospective or precomprehensive area of the storytelling, and suggesting how action maze structures can be inferred from the story-about-to-be-told or the story-in-the-course-of-being-told, or superimposed upon it. Since storytelling is complex and reflective, it is not surprising that the information-decision stychomythia (to-and-fro alternation) of the action maze will be appropriate to the purpose. It is possible, too, to characterise the structure as *combinedly action maze and semio-narrative* since many of the intentionalities and architectural features of the story draw on both traditions.

Teleologically, retrospective stories need a starting point, a causal and temporal sequence, and an outcome or resolution which is recognised. In other words, such storytelling is about goal-setting and goal-recognition. Goal-recognition for such stories occurs in the present, in advance of or actually during the storytelling.

Such GOAL-RECOGNITION POINTS are designated 'GR' within the narrative 'lens' at the centre of the figure. However, it is more complex than it seems because goal-recognition occurs along the experiential dimension. Practically and in real time, a manager might say 'This is where we are : Heaven help us!', or 'So that's what's been happening : let's take stock of this'. This is, experientially, a goal-recognition point.

It might then be argued that *that* is the first point at which the urge for storytelling occurs (or some other form of instantiated meaning, from thinking through the problem to writing a report or telling a story about it). At that point, the retrospective journey begins. A starting point, in



EAT = Experiential-Axiological-Teleological route taken/ chosen through action maze

ET(D₁) = Experiential-Teleological (Deontic) [possible, but NOT taken/chosen] route taken/chosen through action maze

GR = Goal-recognition points

Figure 23 : Action maze teleology reflected in EAD / ETAD model showing dominance of EAT route taken by manager in storytelling

the past, for the 'narrative', is chosen. That forms the starting point of the story. There may be other stories, which are chosen instead, conflated with the main one, or rejected. Within the story itself, paths are identified taking the manager up to the present.

The sequences are constructed teleologically. Paths and outcomes are heavily preconditioned by the storyteller's knowledge of the goals. By this token, after the storytelling, it is likely that the experiential goal-recognition point has SHIFTED. This arises because the manager as story-creator has de- and re-constructed the experientiality of the past, and has, in and through the act of storytelling, changed his perspective upon it.

The 'teleologicality' will have had a shaping effect upon the experiential. By shaping the experiential in and through a narrative structure (a point Carr, 1986, emphasises), the storyteller has changed the 'experientiality', if only by ordering it or by extracting the portfolio of alternatives and consequences. Because of this, a NEW goal-recognition point must be entered (in Figure 23 this is designated as GR2).

This discussion can be taken one stage further still. The experience of retrospective review has opened up not only the shaping effect of teleological narrative but it has also opened up *the putative alternative goal-recognition points which may have arisen had other, now acknowledged as preferred, paths been chosen in dealing with the events and states of the experience*. The basis of the preference, with the wisdom of hindsight, may derive from the manager himself or from the organisational or professional context within which he operates.

The existence of putative alternative goal-recognition points may receive explicit expression in the story. For instance, the storyteller may admit that 'Maybe, I should not have done that at that stage, because...', or say in making expository comments on the narrative that 'Had he not spent so much time building up stock in the library, then he would have noticed that staff morale on the issue desk was low due to overwork'. These narrative and reflective strategies are entirely consistent with the lessoning that goes on in storytelling which gives storytelling its axiological value.

The existence of such alternative goal-recognition points, and the implications, suggest in turn that the act of knowledge representation, in story and in the present, has to subsume another complex adjustment on the part of the storyteller. This adjustment, again reflective, is linked with the way in which the storyteller is trying to understand the events and states of the past, and their various actual and putative outcomes in the present.

Goal-recognition, therefore, is part of a larger process of coming to understand, and in this decision making plays a crucial part. Here decision making consists not just of deciding that certain things were done and felt, or that through storytelling certain things led to other things with certain results. It entails making sense of the various alternatives now facing the storyteller, and using them effectively to make sense-making choices for the future.

Figure 24 suggests that, as a result of and at the same time as the storytelling, there is a deliberative movement goal-recognition to decision making. An attempt to reconcile or conflate the various goal-recognition points takes place so that decision making can be carried out for the

future. At that stage, further action maze and narrative structures will be utilised to construct further storytelling. A reiterative cycle extending (non-linearly and not paced predictably) is likely as managerial storytelling goes on and on.

The ETAD model and craftsman and gamesman storytelling

It is appropriate at this stage to reintroduce the important argument about different types of managers, notably the craftsman managers and the gamesman managers. It has been suggested that craftsmen tended to derive meaning from traditional and technical expertise and attitudes, whereas gamesmen tended to derive it from generalistic, 'corporate', 'political' expertise and attitudes. Differences between them, in terms of the way in which they appear to manipulate experiential and deontic factors in their knowledge representation, were discussed in section 2.

A major difference between groups like these lies in their views about *means and ends*. In politics, an example of an end might be the notion of a fair society, and many definitions of 'fair' might arise; while the means of attaining it might be, variously, distributing wealth equally or encouraging the growth of a market economy. In library management, the end for a library may be defined as (a) offering a satisfactory level of service to its user community, or as (b) doing this only within cost-effective limits, or as (c) doing this only for people who can pay a charge. These draw upon differences of knowledge, perception, ideology and valuation, among managers and policy-makers in the library and information world.

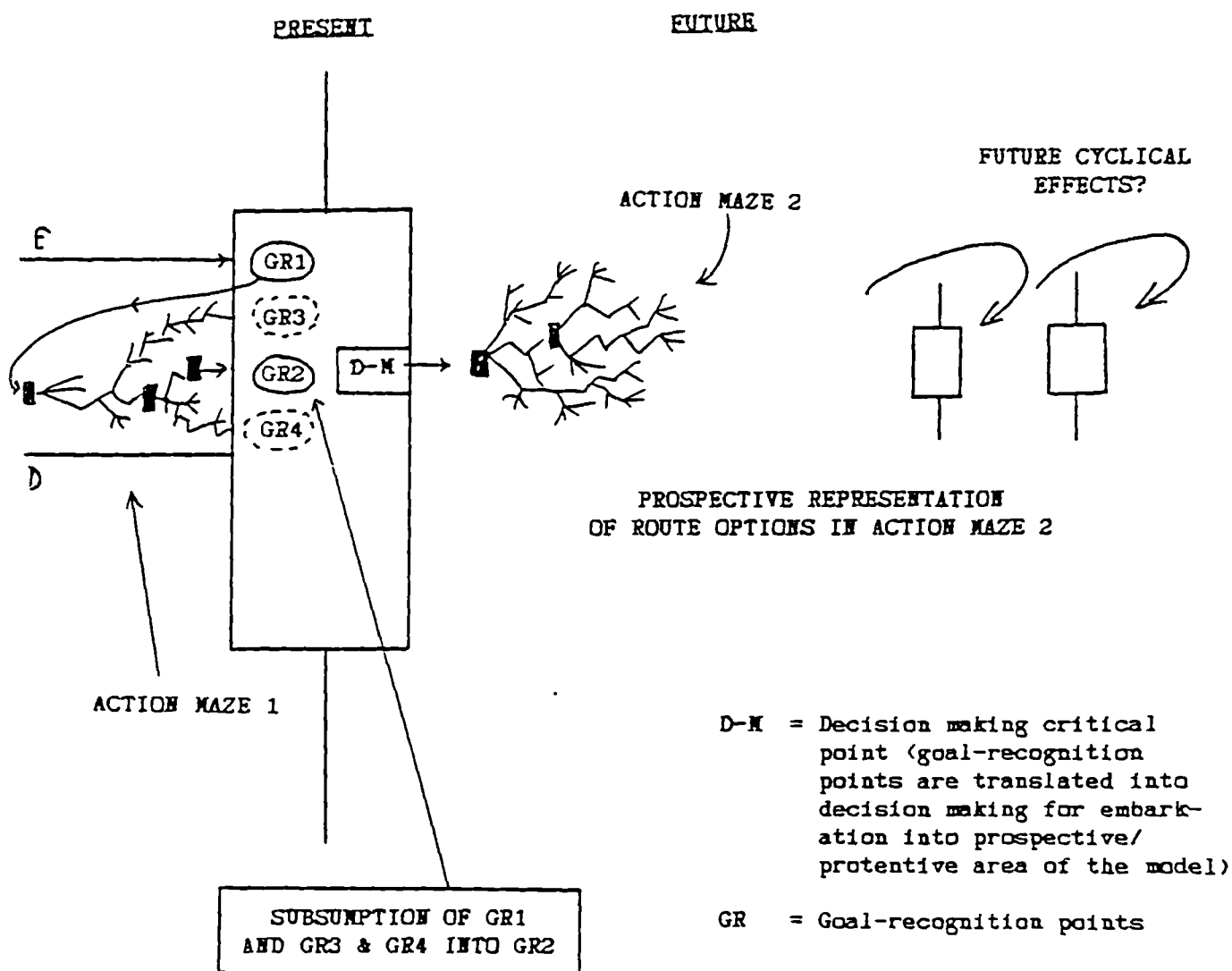


Figure 24 : Action maze teleology reflected in EAD / ETAD model showing how EAT - GR2 dominance influences decision making in future

In the same way, too, there are different views about means to achieve those ends. For (a) above, the means might involve ensuring a generous level of funding or staffing or stock, even at the expense of other priorities; while for (c) above, the means might involve targetting particular segments of the user community and designing levels of service satisfaction preferentially weighted in favour of those who could pay most.

Means-ends analysis is therefore an important element in the examination of how different types of manager tell stories, make decisions, and represent themselves as effective managers. The context of such analysis is naturally teleological, since teleology concerns itself with understanding how things bring about goals. The context is naturally also experiential, axiological, and deontic, since all those dimensions inform any analysis of means and ends, and are strongly represented there.

Typically, means-ends analysis seeks to identify those means which lead to particular ends (eg in policy making in a local authority library service, or in financial planning for an academic library), or, from the other end of the time-frame, how particular ends have been reached by available or alternative means. A plurality of both may exist, and competitive ideologies may characterise the struggle to carry things out in real life, as well as to represent them in some form of discourse.

Implicit in means-ends analysis is the definition of meaning (especially as it derives from a multi-paradigmatic or multi-ideological context), the identification of preferred choices, and goal-recognition.

So, in such an analysis of effectiveness for a manager conducting a collection management programme in an academic library, ENDS might be

identified as (1) coverage at level of satisfaction A (say, 75% of normal requests) across all subjects (arts, social sciences, sciences); (2) coverage at level of satisfaction B (say, 60% of normal requests) across all subjects; coverage at C (say, 50%, with another 25% covered by inter-library loan, or encouraging users to use substitutes) across all subjects; and so on. Those ends exist in context : funding priorities, political programmes for the parent institution, the costs of reading materials in the book trade and the economy as a whole, and so on.

For MEANS we might identify the formulation of priorities among the planning team in the library, their ability and wish to prioritise stock in relation to other allocations, how staff might be made available to help users locate substitute reading materials, and what kind of catalogue users might use to find what they want.

It could be suggested, too, that for traditional or 'conservative' managers, keen to preserve the status quo, a likely pattern for means-ends analysis might be based upon tried and tested experience. It might take this form:

$$(\text{means} \rightarrow \text{ends}) \Rightarrow (\text{means} \rightarrow \text{ends}) \dots$$

while a pattern based upon changing circumstances or radical managerial attitudes might take this form:

$$(\text{means } 1 \rightarrow \text{ends } 1) \Rightarrow (\text{means } 2 \rightarrow \text{ends } 2) \Rightarrow (\text{means } 3 \rightarrow \text{ends } 3) \dots$$

These differences, noted in discussions above, represent simply a phenomenon which appears in many complex forms in management, that conceptualising and identifying and reflecting on means and ends vary considerably with different types of managers and organisations. At times of change, and changing paradigms or multi-paradigmacy, and conflicting ideologies (such as how best to provide a 'good' service or to be a 'good' manager), the ability of the manager to change with change, and to face change proactively rather than reactively (so that change itself can be changed and better controlled) is central.

Toifler (Toifler, 1985) argues that 'the adaptive manager today must be capable of radical action - willing to think beyond the thinkable; to reconceptualize products, procedures, programs and purposes before crisis makes drastic change inescapable'. His advice is that such effective managers should be able to 'de-construct their companies to maximize manoeuvrability', an idea worth extending to the way in which such managers can learn to do this with the discourse representations of the referent organisational reality, above all through storytelling.

The analysis of craftsman and gamesman storytelling will first look at the retrospective part of the process, and then at the prospective part. Figures 25 and 26 represent the principal components, relationships, and movements.

Retrospection was identified as being a major vector for sense-making. From the vantage point of the present, and informed to the point of goal-recognition (GR1) by the experiential, the storyteller goes back semio-narratively and identifies a starting point for the causal and temporal

sequence. This may have a clear path up to the present, where a narrativised goal-recognition point (GR2) can be found.

Putative viewpoints, representing where the story could have ended, are intellectually and imaginatively acknowledged because the axiological and, above all, the deontic are actively at work. These putative points receive goal-recognition status as GR3 and GR4.

Following the logic of how the experiential dominates the deontic (section 2 and Figures 16 and 17) for the craftsman manager, and how in means-ends analysis there is a tendency for conservatism to lead to a recycling of tried means-ends nexuses, it is possible to suggest that, in the ETAD model, a craftsman will take this retrospective journey from GR1 (the experiential goal-recognition point), retrace his steps narratively, taking account of alternative paths but, using a conservatively orientated precomprehension (for this, after all, is a hermeneutic circle), allow or make sure that the path followed through the story dominates others (putative, deontic).

The reasoning is that, teleologically at both goal-recognition points 1 and 2 (ie after the experiential, and then after the experiential is narrativised), the storyteller is convinced (or convinces himself) that the point at the end of the story is indeed a true reflection of reality. This might, of course, entail a denial of the persuasiveness of the putative alternatives.

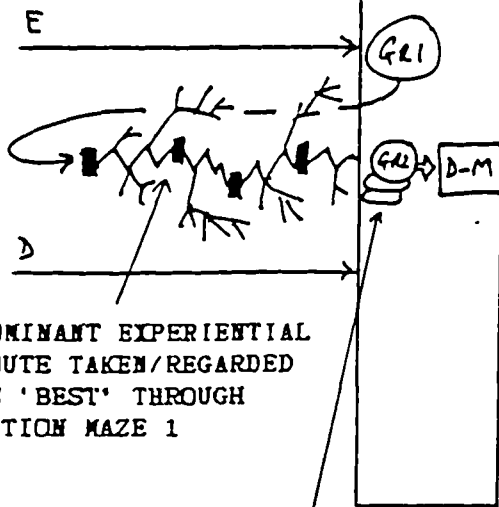
Diagrammatically, this idea is represented as if GR2, GR3 and GR4 are a small pile of coins, with GR3 and GR4 directly under GR2. Interpretatively, it means that the storyteller is convinced or content with a goal-recognition point, after the story, at which the narrativised experiential

RETROSPECTIVE STORYTELLING

CRAFTSMAN MODEL (E > D)

PAST

PRESENT



DOMINANT EXPERIENTIAL
ROUTE TAKEN/REGARDED
AS 'BEST' THROUGH
ACTION MAZE 1

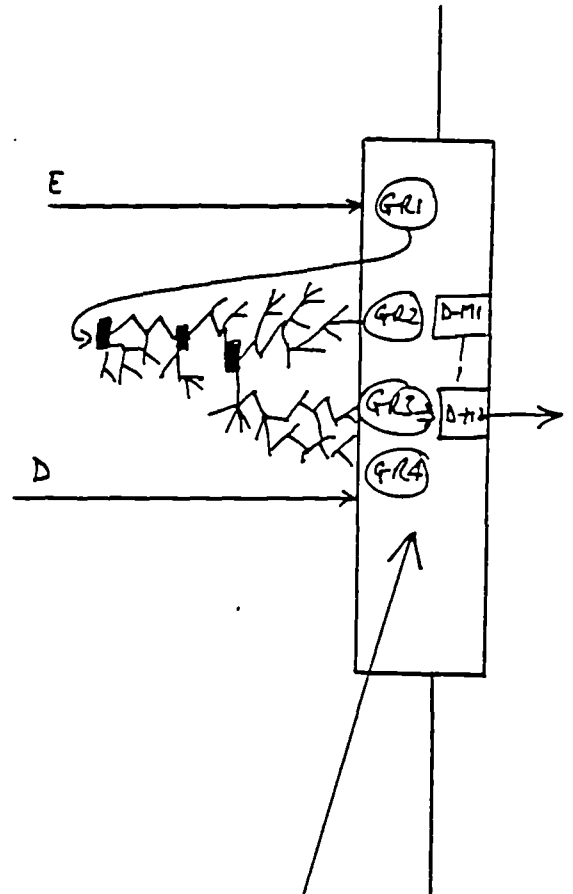


SUBSUMPTION OF DEONTIC GOAL-
RECOGNITION POINTS GR3 & GR4 UNDER
EXPERIENTIAL GR2

GAMESMAN MODEL (D > E)

PAST

PRESENT



Storyteller, with adaptive sense of value and preferability of rejecting or diversifying conventional 'craftsman' route through action maze, (a) selects deontically influenced routes to GR3 or GR4, with result that (b) the decision making point (forming the criterial starting point for prospective storytelling) is reconstructed in another position.

Figure 25 : Retrospective representation of ETAD model for craftsman and gamesman managers

PROSPECTIVE STORYTELLING

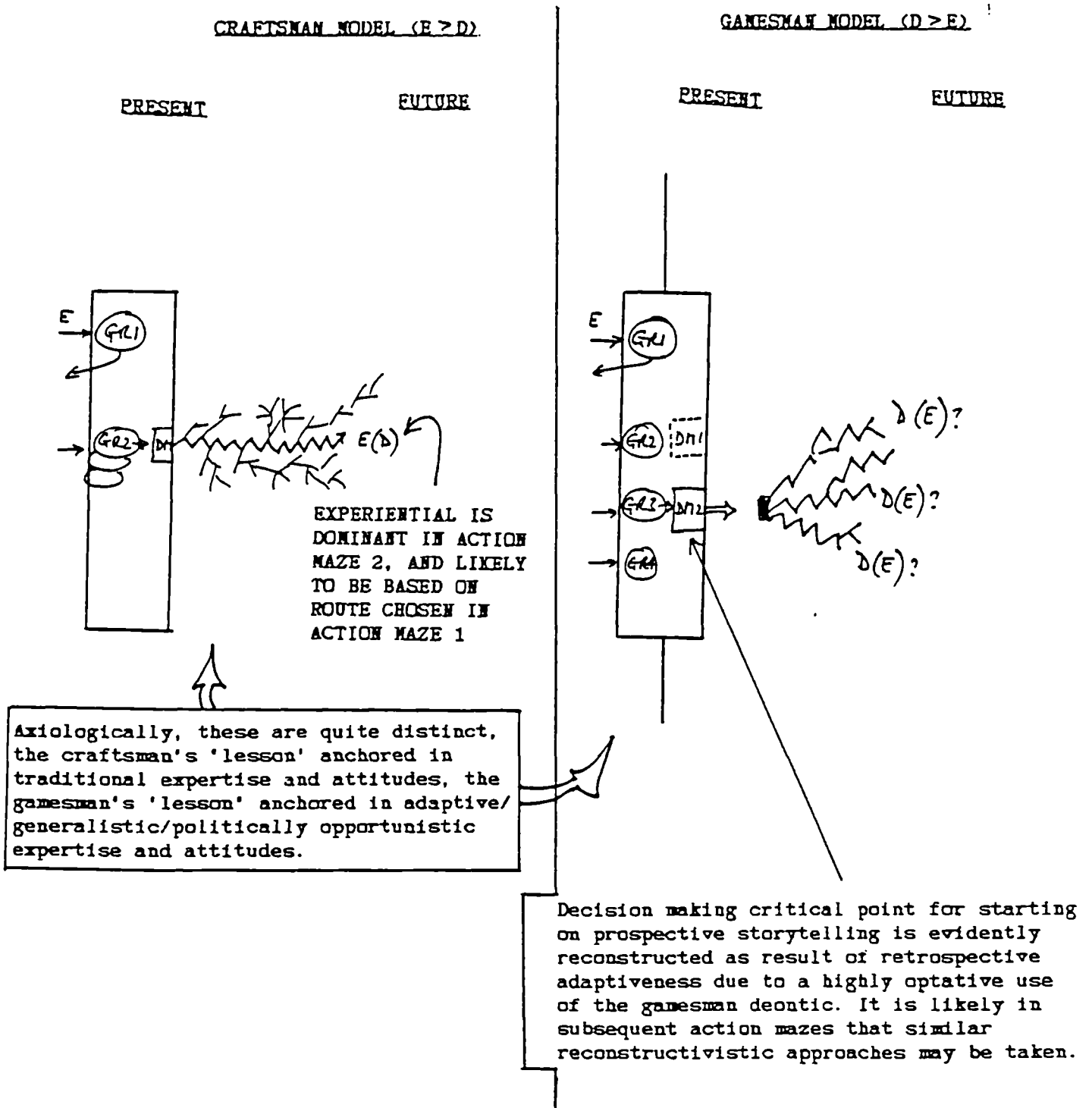


Figure 26 : Prospective representation of ETAD model for craftsman and gamesman managers

reality subsumes (and therefore represses) alternatives which the act of reflection has or might have thrown up. Decision making, as a consequence, draws on two acknowledged goal-recognition points, GR1 and GR2, with results explored below.

In Figure 25 the two types of manager should be compared. The gamesman manager travels through the experiential dimension to goal-recognition point GR1, takes a backward reflective loop to the starting point of the narrative. The complexity and manoeuvrability of the action maze structure there confronted him. He recognised it then, recognises now his act of recognition then, and behaves accordingly. Traditional paths are recognised and their outcomes identified (eg one would certainly lead to GR2): the gamesman manager knows the goal-recognition points of collegial craftsman managers, and adopts a meta-storying and reflective approach to those craftsman goal-recognition points.

The gamesman manager also, because his agenda is generalist or 'supra-technical', corporate and political, avails himself of another path or some of the other paths through the action maze. Personal commitment to one or another path is unlikely if paths are heavily technical- expertise event- and-state orientated, except for reasons of political convenience or advantage. Because of this, the journey through the narrative/action maze will or may well lead to rejection of GR2 and acceptance of (at least) GR3 and GR4 (and maybe others as well). GR2 may well not be rejected, but accepted as a possible GR, but probably not the best (ie politically advantageous).

Given this diversity of outcomes at GR stage, it is natural, when goal-recognition translates itself into decision making, for it to be more

varied, to offer greater manoeuvrability, to be more proactive and protentive (ie open to the future). This, again, will be discussed below.

Looking now at the prospective area and turning to the craftsman manager, who has also reached the point, during the process of storytelling, in the present, at which goal-recognition translates itself into decision making, we are now able to look into the future. In Figure 26, which shows the prospective area of the craftsman manager, we are able to see the means-ends analysis logic at work, and the way in which the experiential dominates the deontic. Of the various possible goal-recognition points, GR2 (repressing alternatives like GR3 and GR4) dominates the decision making starting point (DM).

From that, in a kind of cyclic self-fulfilment, amid the available paths of a new action maze/narrative the experiential again heavily dominates the deontic, on the grounds that what has happened should go on happening. Moreover, the decision making base is less broad because it draws on a knowledge and admission of (the existence of) a plurality of goal-recognition points deriving in their turn from the numerous paths and outcomes admitted to the storytelling process.

An axiological footnote to this might be that the lesson learnt from the retrospective journey exerts a predetermining influence on what lessons are eligible from the prospective journey. This in turn predicates a kind of canonical knowledge and ideology at work which is based upon restrictedly technical expertise and attitudes used tactically to resist or evade the claims of organisational change.

Looking at the gamesman manager in the prospective area, we see from Figure 26 that, when goal recognition translates itself to decision making, the manager can avail himself of a richer portfolio of options. The goal-recognition points GR3 and GR4 suggest that, through his storytelling, this manager has been able to identify the merits or plausibility or plain utility of paths other than the one which a traditional manager might take (or which the gamesman manager realises that the craftsman- manager IN HIMSELF might take in certain circumstances, say, in conditions of stability).

There is a determination also to impose 'what he knows needs to be done' on 'what has traditionally taken place'. In other words, such a manager has a radically different interpretation of the deontic from that of the craftsman manager, who tends to regard what should happen as a temporal and ideological continuation of what has done so.

For the gamesman manager, the deontic paths through the action maze/ narrative have shown themselves as really worth acknowledging. Able to look both behind and in front, and in front proactively, such a manager uses the narrativisation as a way of arriving at new decisions. In other words, he is able not only to draw on more goal-recognition points, but to shift the decision making starting point itself (from DM1 to DM2).

From that new point, new action maze/ narratives will develop. In them recognition may still exist of traditional options, since gamesman managers know that they have to work with craftsman managers, that craftsman expertise and attitudes are necessary to run the organisation, and that only when an understanding of such expertise and attitudes is clearly held can a gamesman manager induce change. It is likely, moreover, that the range of

paths during that prospective phase will contain many of the gamesman's deontic options, as well as being hospitable to other options which are appropriate and beneficial.

Two managerial storytellings

In the course of this research many managerial stories were discovered. Some were stories in the sense that Wilkins and Martin and others speak about organisational stories (eg small guys doing all the work, rules applying even to the chief executive, and so forth). Others were storied versions of managerial experience, often told as stories interlarded with commentary and inferred lessoning. Some were apparently objective accounts of what happened, others rationalisations or self-serving accounts of what might have happened. Characteristic of all of them, despite the variation of length and the degree of systematic organisation, were causal and temporal sequencing.

Characteristic of most of them was a statement, explicit or implicit, that some lesson or other had been learned from the experience. In fact, many were brought into being in order to make a point, or to describe a recent event or state to demonstrate an issue of interest and concern. Of several hundred such storied experiences gathered in obtrusive and unobtrusive interviews, many dealt with events and states with which the narrator was still trying to sort out, as if the outcome or goal-resolution was provisional, would go on into the future, and might in fact form a recurrent feature of professional life. An assumption was made that, by using non-confrontational methods of recording data, and by inviting informants to

communicate by a very familiar form of discourse, the story, it was possible to glimpse from time to time hidden layers of meaning and experience.

The ethnographic and grounded theory principles and procedures on which this approach is based have been described in earlier chapters of the thesis. For our purpose here, it is important to reiterate that among the CONTENT themes was repeated mention of the tyranny of routine, status, the problem of keeping up-to-date, the lack of finance, and having control over one's destiny.

It has been possible to draw on dominant themes like these in examples in the succeeding discussion, particularly since pattern-matching analysis on grounded theory principles revealed the widespread preoccupation of respondents with them, and similarities in terms of reference and organisation to them. Inferred from them was the thesis that many librarians appeared to fall into one of two categories, craftsmen or gamesmen.

There were also PROCEDURAL themes, like the recurrent choice of events near to the present, the use of causal and temporal sequencing, first-person narrative and widespread use of interpolated commentary, lessening (particularly 'success-from-failure'), and portrayal of colleagues and users by position rather than by name (for reasons of discretion). Meta-storying features included the admission that the telling of the story tended to enhance their understanding of the events and states.

These points enable us to put the present argument in context. Content and procedural themes, once identified, enables ethnographic research to infer an 'a posteriori' model, and then, once substantiated, apply it in an

inductively 'aprioristic' way to further evidence. One of the claims of this research is that the ETAD model is applicable in this way.

At this stage, too, we are concerned with INTRA-STORYING, that kind of 'micro' study which seeks to examine how managerial knowledge representation occurs in and through the storytelling of the individual manager. Some contextual factors and implications for INTER-STORYING, that 'macro' view taking in groups of managers, will be considered in chapter 12.

The material obtained in the stories referred to in section 2 was used again at this stage. Twenty 'storied experiences' were analysed. The storyline was 'what in their view it was like to be an effective manager'. Informants were invited to 'describe' (ie 'story') a self-contained episode which in their view dealt with that storyline. Content and procedural themes of the kind described above were identified to assist in separating craftsman from gamesman stories.

The principle on which this was achieved was based on the claims of the major semio-narrative and goal-based structures of the storytelling, including events and states. This process was greatly assisted by signals, overt and covert, in the story and the storytelling (tone, expository comment, self-serving remarks, political asides, forms of self-parody, value judgements, attributions of success and failure to particular agents or events, and the like). Though assisted by rashomon features like this, the selection and analysis of the textual content of the storied material formed the major focus of the research. In this way, it was possible to make a practical division of the storytellings into fifteen craftsman and five gamesman examples.

Recurring or formulaic story-shapes were identified by means of which it was possible to analyse and differentiate between types of stories.

Retrospective reflective loops and goal-setting recognition points were common to all stories, and all of them, whether elaboratively or fleetingly, affirmed or implied the existence of alternative paths which were not taken or which, from the vantage point of the present, should have been taken. In other words, for all of them the dialectic between the experiential and the deontic was highly evident.

Similarly, all stories observed the teleological features of a causal and temporal sequencing of the narrative, coupled with the axiological urge to find and define a 'lesson' , and a preference for using the past to help define or outline plans for the future (that translation from goal-recognition to decision making).

At the same time, there were differences. Most important of these was the fact that the two kinds of informant tended to select distinctive paths through the action maze/ narrative structure.

The craftsman managers veered strongly towards confirming and re-confirming the truth value of the experiential, not just by emphasising the experiential dimension as a way of representing and reflecting upon events and states, but also by closely affiliating the deontic with the experiential.

For them, what should have happened (despite all practical problems) was, *essentially*, what should have happened. In practical terms, this entailed the assertion that craftsman expertise and attitudes, applied and demonstrated in the storytelling, was right to affirm the value of that (ie

traditional) expertise and those attitudes, and to suggest that what had happened in the past as a result of the exercise of that expertise and those attitudes should play a dominant role in the future. This meant, as the analysis of the ETAD model indicated, a restricted means-ends logic and the utilisation of a relatively limited portfolio of goal-recognition points in decision making for the future (and by way of reviewing, through story, the present state of affairs).

The gamesman managers, on the other hand, emphasised the importance of the deontic over the experiential, suggesting that past events and states, whether successful or not in their time and way, should be reviewed adaptively and flexibly. Importance had to be given to the 'political' factors in the past, present, and future, and past events and states, and their possible alternatives, should be regarded in this manner. The alternative paths were often regarded as preferable, or, alternatively, the 'lesson' of what path to take for the future was that the past path, as such, was inadvisable or inadequate.

The reason for this lies not only in the radically adaptive approach of the gamesman storyteller, rating highly gamesman expertise and attitudes, but also a clear recognition of the factor of change. Adaptation to change characterises the learning organisation. Accordingly, such storytellers assured themselves of a broader portfolio of goal-recognition points as a result of taking the retrospective reflective loop and working through the action maze/ narrative sequence, enabling them to draw upon this portfolio in making decisions about the future.

To illustrate these points, the two 'most typical' craftsman and gamesman stories, one of each, were selected for detailed analysis. Readers will find

reference to Figures 25 and 26 useful to clarify the retrospective and prospective stages of the ETAD model through which the two stories develop.

The craftsman story

The craftsman story was based on the library manager's experience of being involved with the introduction of an OPAC (online public access catalogue) into an academic library. She held a third tier post in a polytechnic library which had introduced the OPAC over the past three years. It was now up and running, most teething troubles over, and ready for extension by adding a module for management information. She had taken an active part, having been assigned system development duties on top of her general duties with staff supervision, stock management, and user education. The 'story' told, the storyline of which was 'what in her view was it like to be an effective manager', concerned a series of episodes in which she faced problems and, in her view, sorted them out.

In the analysis below, the story will be rendered in bold type face. The researcher has retained only those passages which directly relate to the storyline, and has excised digressions. Some grammatical errors and some references to identifiable people have been removed for ethical reasons.

The respondent, in conversation, expressed modest doubt whether she was indeed an effective manager. Then she started her story:

If I had to choose one thing... that I suppose shows that I can be effective... at times anyway... it is the time that the OPAC got installed on this site. I had been working with the system for about a year by then, had attended lots of meetings, met with the suppliers, gone on training courses, argued about all the specifications.. because we really wanted the OPAC to do specific things for the library otherwise there was no point in having it in the first place....

The narrator gives a clear indication of the experiential dimension at work, coming up to the present when storytelling began and where, as a result (and preemptively) the first goal recognition point has been identified.

From this, the retrospective reflective loop is taken back to the start of the 'story' itself, the time when the OPAC had been installed on the site (ie the site library, because the polytechnic consisted of six sites, each with its own library, as well as a central site).

This site was the first site library to get the OPAC, so we had more teething troubles than later on. The installation proved difficult because of space close to the narrow entrances and the electronic security system. Shields had to be constructed for the terminals near the security system because of interference : we had not anticipated that. My job was to make sure it was working well our end, and then to start introducing the site library staff to the OPAC. It was not easy because everything else had to be kept going. Management doesn't seem to realise that!

We may infer from this early stage of the story that the narrator acknowledges the existence of several alternative paths (eg not to have put the terminals near the security system, to have had more staff time for training). These are characteristics of the action maze. The informant was asked at this point if probabilities could have been attributed to these identifiably distinct paths or 'ways of doing things': she said that the way in which things had happened had been overwhelmingly the most probable (pressures of time, problems of space, ill-informed [top] management, and attributed 0.8 to that path, allowing 0.2 to cover all other actual and possible options.

It is noticeable, too, that the narrator takes the story onwards through the path which shows the experiential dominating the deontic (ie which serves to confirm that she thought that what had happened was what should have happened, despite the practical problems).

I felt that everything was happening at once, so I sat down and took stock. I had to think things through carefully otherwise we'd have chaos on our hands. I wrote it all down. First, second, third, kind of thing. We had to keep the issue desk running because otherwise users would complain. I couldn't pressure the staff too much because they were already pushed for time... There was so much trouble-shooting for me that I had to delegate some of my routine jobs to X. I then organised a systematic rota for each member of staff to get training on the OPAC, so that when it took over from the manual issue system everyone knew how to use it properly. I suppose I could have arranged it so that they went to some central course [with staff from other sites], but that didn't seem right at the time. Bit by bit, they got to know what to do. There were problems of course - when the thing

[system] crashed and some people found the protocols complicated - but we worked on it together. I learnt a lot and was able to make some changes.. It was not an easy time. I always felt tired. Now the system's up and running, and everyone seems to be using it very satisfactorily... The users don't seem to mind it any more. Looking back at the whole experience, I think I would do some things differently perhaps but on the whole it went well. We're now planning to add the extra [management information] module, and I'm going about that step by step, as before. It's all in the interests of efficiency, they tell us. But as far as I'm concerned, so long as I do my job and have a chance to get on with it, then I'm fairly happy... Yes, looking back, that's probably an example of when I was effective...Mind you, I don't know what other people really think!

The narrator emphasises the fact that, in the face of possible confusion, she used her professional training to sit down and look systematically at what to do, thus defining herself experientially, and implying that what she should have done she actually did. A high degree of awareness exists of the teleological shape of the story : the effects of the changes on the issue desk and likely complaints from users if they could not borrow books and get advice; and the acknowledgement of crises if she pressured busy staff to do too much with the OPAC. Delegation and the organisation of a rota were things she had to do, and, in retrospect, is convinced that had to be done: these were answers rooted in the expertise acquired through her work.

Features of the action maze reappear from time to time, as when she speculates on the possibility of having sent her staff for training at the central library rather than carried it out at the site library. She rejects this, reasserting the essential plausibility of what she actually did. They

worked on it together (and thus built up a sense of being a team, one of the highest competences identified in the survey in chapter 5) and staff did cope with the learning curve, although they were busy and may have been suspicious.

For the narrator the goal recognition point occurs when she states that she and her staff had successfully come through the experience, and that both staff and users were using the OPAC effectively. Other possible paths (GR3, GR4, etc) through the action maze(s) which the story contains, from the alternatives at the start to the admission at the end that details might have been different, are subsumed by the second goal recognition point (GR2). It is from GR1 and GR2 that the narrator is able to build her decision making point for the prospective stage. This she knows is facing her and consists of the enhancement module on management information.

Her emphasis is craftsman because she tells the story 'apolitically', except for two revealing comments, first about the unsympathetic attitude of top management (which could be senior library staff but which, upon inquiry, turned out to be top *administrative* [ie lay] staff in the institution), and second in her self-deprecating final remark about what other people might think of her alleged effectiveness. Her narrative position is that such people are often obstructive. They may need to be won round but that is not, in her view, her job. In conversation at this point, she said she regarded political skills as senior management skills, and said there were enough interpersonal 'politics' at her level!

If she has an attitude to the broader, extra-professional implications of her experience, and any lessons she may have learned from it, and from storying it, it is that such implications lay on the outside of a series of

concentric circles of relevance, extending outwards from her professional experience with products and services, other staff, and library users. This is the decision making base for the prospective phase. It is a craftsman manager's approach, represented revealingly in the act of storytelling.

At this point we may refer back to two ideas described earlier: first the way in which, in the referential hierarchy, managerial meaning can be expressed through propositions which, when they are used epistemically, become axioms (see Part 2); and second the way in which storying consists not merely of narrative but expository comment (see chapter 9).

Each respondent was invited to summarise their story in one axiomatic statement. Responses were structured by starting the axiom with the words 'In my view I was effective because ..', and respondents completed this. Such a statement would, arguably, embody or flag the major lesson from the reviewed and storied experience (ie it would be axiological), and a fortiori it would encapsulate what epistemic authority they believed they had been able to endow on the story and confirm through storytelling. Such a statement would have a propositional structure for reasons of analysis, and its status would be (and be recognised as) expository. It would also be a *belief-statement* in the sense used by Eden in his research (see section 2), with its corresponding structures.

This craftsman manager completed the statement in this way: 'In my view I was effective because I was able to use my experience as a librarian to get things done. If I had not achieved this, I would have been ineffective'. Her reply was typical of the other craftsman managers investigated. Represented in terms of Eden's belief statements, this derives as follows:

/Effective/Ineffective/Librarianship --> + /Success//

The conceptual arrangement indicates that both effective and ineffective professional behaviour are admitted, and that either can be shown through librarianship. 'Librarianship' is the concept used rather than 'management'. It has a positive effect on 'Success' in that the more of effectiveness or its opposite leads to success or its opposite. Its opposite, failure, exists in a void (the final double slash) because there is no mention of it although it is a logical consequent of ineffective librarianship. A contrast will be drawn below between this and the gamesman belief-statement.

The inerrability and centrality of explicitly gathered belief-statements like this are important in view of the fact that they summatively ratify the meaning and value of the story as told. Moreover, they reflect the importance of the referential hierarchy as a programmatic within which research might characterise and analyse such knowledge representations as storytelling. It has been argued that storytelling subsumes the concepts, propositions, scripts and stories of the referential hierarchy, and the referentiality of it lies in the experienced reality of the managers telling the stories. It also serves to confirm the central place of storytelling in the process called the management of meaning.

The gamesman story

As a contrast, the second storytelling was that of a gamesman manager. It was selected and organised on the same principles as before. The manager

concerned had been working in a special library (in an oil company) for just under a year. Before that, he had had experience of other special libraries in the conservation and ecology fields. He had taken on what was called an information and archiving unit from the secretarial/administrative department, where for two years documentation and retrieval techniques had grown in complicated, inconsistent, and unprofessional (ie non-librarianly) ways. The unit was regarded as part of the territory of the administration division. Many documents in the company had been built up independently by other departments (eg patents and legislation by exploration and production engineers). In consequence, the unit was inefficient, ineffective, and incomplete.

The storyteller was convinced that he had to improve the profile and credibility of the unit, convince top management that its contribution to company profitability was assured, and organise documentation and retrieval systematically and intelligibly. His story reflected these aims and reveals a high degree of 'political' awareness throughout. Once again, the story will be represented in bold type, with the analysis around it.

If you want to know what this place was like when I came, there were piles of paper all along this shelf, boxes of company folders packed away in the basement, a run of patents with most of them in other departments, and a catalogue which no one could use except some of the secretaries. So my first job was to put that lot in order!

Representing the experience has enabled him to define the experiential dimension and the first goal recognition point. From there he is able to

take the retrospective reflective loop back to that point in time when the story starts, when he arrived in the company.

That arrival is not just described experientially. Deontic assumptions and comments are strongly evident with his description of the disorder (as he saw it from his own 'professional' viewpoint at the time), arguing that things should not be like that, should have been different, and that he would have to get down to putting them right. It was not a 'real' (ie effective) information unit. He would not be a 'real' (ie effective) library manager unless he succeeded in this.

Any number of things could be done. I could have started setting everything to rights in the unit, taking an inventory, weeding, ordering new stock, reviewing the catalogue. But I thought - wait a moment! - first things first. What about the people who used it all? Should I ask them? How was I to know what they wanted or needed? And then again, they didn't know me - I was brand new - so it might be a good idea to get out there and make contact and not hide myself away. I decided to get things going here, but more important meet people and make myself known to them.

At the goal-setting start of the storying process, where the action maze / narrative begins, the narrator establishes his awareness of a plurality of choices - to be efficient (get the unit tidy and working) or to be effective (get an idea of its role and impact and image), to stay in or go out, to do specific things first but not exclusive of other important things.

His approach through reflection is that of a hermeneutic circle, with its precomprehensive elements adaptively and radically reformulated because of the perceived needs of the context. This reformulation is expressed at the start of the storytelling, and is clearly most important for the content and procedure of the storytelling, and the intended impact the narrator hopes it will have upon the audience. (He is also telling himself the story!)

He is highly conscious of a number of plausible paths through the action maze, and of many complications (compare Labov and Walezky) and branches throughout the causal and temporal sequence.

Asked to attribute a probability value, in the Bayesian manner, to the initial choices which he thought he had when the story started, the narrator answered in two stages:

first, by suggesting that no one path was obvious in view of the experiential background he knew he had, and in consequence the choices (organise the documentation or retrieval, review the collection, carry out a user needs analysis, make himself personally better known) were more evenly spread out; then

second, later on, as event chains developed and had a systemically interactive effect upon each other (eg the development of an effective current awareness service would mean time spent on that at the expense of, say, trying to persuade top management to increase the library budget). Because of this, the probabilistic attributions turn out to be complicated multiplications of branch-by-branch probabilities (conditional probabilities multiplied by each other since they are independent, ie both happen simultaneously).

Such is the deontic sophistication of this manager that no exclusive reiteration of a strictly librarianship-orientated path is selected in the storytelling (because no such path was actually taken).

...With all these choices, things were really difficult in the early days. I was trying to get things in order here. Trying to persuade the head of admin to relinquish her hold on the back files. Trying to get to know who was in the company, what they held, what they thought we held...even if they used the unit at all. Some didn't even know it existed...Department Y had gathered together all the patents they needed and kept them to themselves! some of them weren't even up-to-date!...'

What characterises this stage of the gamesman manager's narrative is the way it simultaneously maintains open alternatives, the mental equivalent of balancing plates.

There is a strong awareness, too, of the causality of the choices. This awareness acknowledges the traditional craftsman-manager's choice, of showing effectiveness by utilising conventional expertise and attitudes. This is recognised (we can see this by the content and tone of the story) and the narrator is proleptically (ie his anticipation is reflected in the tone and/or grammar of the storytelling) aware of what goal recognition point (GR2) such a path will lead to. There is a vigorous and gyric interplay between the information and decision steps of the traditional action maze, as the narrator

(a) deconstructs and reconstructs the dialectical relationship between the experiential and the deontic (concerned with the negotiation of meaning);

(b) exteriorises and reflects simultaneously on the contingency between the retrospective and prospective (concerned with the collaboration, in intra-storying, between personae of the storyteller, by which again meaning is instantiated); and

(c) acknowledges that there will assuredly be a number of goal-recognition points.

To these points (and later from and with the aid of these points), the shaping consciousness of the storyteller, can avail itself of a relative wide portfolio of experiential, deontic, axiological and teleological knowledge to make its decisions for the future. This is possible since it is both adaptive and politically aware, and since such an awareness breeds a deonticity in its own image. In the future, too, it knows that the process will reiterate or recycle, and gamesman expertise and attitudes will ensure that effective decisions are made.

An important aspect of the experiential-deontic-axiological 'mix' is the implicit belief by the gamesman manager that things can be changed proactively rather than reactively. This characterises political agency in organisation behaviour, and gamesmen are (or learn to be) good at inducing such change. Criticisms of others, the use of their knowledge (eg how they ran the unit before he came), their ideologies and belief-systems (eg how territorial some departments appeared to be) characterise such managers and

their storytelling. They are looking for success, and have an instrumental view of the views and behaviours of other people.

Their stories reflect this cast of mind, particularly when they emphasise how flexibly such managers as themselves (or as they perceive themselves to be) are prepared to be to work their way through events and states as effectively as possibly, and to represent this successful passage (truly or falsely) in the stories they tell. The story continues:

I felt it was essential to get a quick overall idea of the unit - what it did and what it should do. Everything about the unit had to be, and seen to be, efficient, costed out, so that, if anyone asked what I cost or where the finance went, I could tell them accurately. There's a double-edged attitude to information in the company - they know it's important but have no idea where to find it or how to organise it. And that's where the unit comes in. I felt it was my job, above all, to get them to recognise that. OK it's self-serving, I keep myself in work, but it's larger than that! A company as international as this should have an effective information service...So I wanted to make my mark early and make the unit a success.

'... It all came to a head after I had written a long report outlining what I wanted for the unit - full-text retrieval of patent literature using CD-ROM, complete centralisation of documents, and a normalisation of archiving procedures [paper-based, microfiche, and electronic systems all existed in the company]. It needed substantial capital funding, as my report said. I had surveyed a large number of younger executives, and ... so was in a very good position when I put my case the other day to the directors. I told them what could be done for the company by such a unit if it was

properly funded and had proper retrieval... It was quite a meeting, but I got some of what I wanted. Things seem to be going in the right direction...

What is dominant here is how politically aware the alternative goal recognition points are. We can infer from the narrative an action maze which displays these paths, representing not only the plurality of choices at the start and complex causal and temporal branches throughout, but also goal recognition points (GR3, GR4, and so on) which the storyteller (a) recognises and is seen to recognise during the act of storytelling and (b) which he clearly recognised as he was experientially living through the information-decision-information-decision steps of the action maze / narrative itself.

These goal recognition points receive confirmation from expository evidence in the text. Everything in the unit had to be seen to be efficient. He could tell them accurately what he cost. He wanted to keep himself in work and make his mark early. In a story-within-a-story, the meeting to discuss his report, he draws on his craftsman-manager expertise (on CD-ROM and the rest) to substantiate his essentially political case for survival and expansion. He uses techniques (eg market research) understood by and credit-worthy with his lay interlocutors, demonstrating an adaptive ability to move from 'librarianship' to the more generalistic domain of 'management'. He was pleased with success : he got some of what he wanted and thinks things are now moving in the right direction.

He has been able, through reflective storytelling, to represent, review, and communicate the 'meaning' of major experiences through which he has lived managerially in the last few months. Continually he is defining or

redefining meaning, moving within the dialectic of the experiential and the deontic, suggesting that his 'deontic' is closely identified with the 'deontic' of what he perceives as the power base in the company whose favour he must attract and earn (ie it is a hegemonistic deontic). He demonstrates an ability to move in and out of various personae as he intra-storyingly collaborates to create meaning (or a simulation of meaning for a third party) out of the management he knows.

Again, we might apply Eden's belief-statement analysis to this story. As with the craftsman manager, the gamesman was asked to complete the statement 'In my view I was effective because...', which he did by saying that '...I was able to get management on my side for what I wanted the information service to be. Changing perceptions and proving what it can do is the name of the game'. A number of revealing differences from before can be identified here.

First, the conceptual base for how he sees himself professionally is 'management' rather than 'librarianship'. The library is 'an information service', and librarianly skills are taken as read. Second, he speaks of what such a service can 'be' rather than 'do', suggesting a broader company-orientated role for a hypothetical service which exists in a bigger better state in the future (to which decision making will inexorably and optimistically lead him).

Third, just as there is an acknowledgement of plurality and how contingency can be manipulated, so there is an acknowledgement of the possibility of failure : the scenario is broader - it is seen as a 'game' - whereas, for the craftsman manager, there was a kind of dogged, almost myopic trustingness which argued for success coming to those who were merely

persistent, or even a naive faith that traditional virtues would prevail. In consequence, we can represent the axiomatic belief-statement distillation of the gamesman manager's story in the following manner:

/Effective/Ineffective/Management --> + /Success/Failure/

indicating no void (since 'Failure' is now included). There has been a conceptual change in the key meanings: a change in the structure of the axiomatic belief-statement reflecting a change in the semio-narrative structure of the storytelling. Reflectively, too, there is a changed perception of the teleology of this structure. There is another change in the implied axiology or lesson-drawing dimension: here, with librarianship turned to management, success based upon generalistic corporate expertise and attitudes, and that success based upon mastering the process of 'work' seen as a 'game', the negotiation, collaboration, and representation of meaning in this intra-storying, demonstrate a radically different representational strategy from that shown by the craftsman manager.

Telling what is true

Storytelling in this context would be valueless unless it were to shed reliable insights on the process of management. The ostensible ambivalence of storying as a medium for the representation of managerial meaning has been discussed earlier with reference, *inter alia*, to Vaihinger's 'as if',

the provisionality of fictionalised 'truth', and managerial symbols and myths.

On the one hand, stories seem to be not just universal but entirely true exteriorisations of mankind's knowledge, beliefs and feelings. On the other, it is alleged that stories are merely anecdotal and partial representations of the truth, somehow intrinsically less true than factuality (just as historical fiction is less true than history itself). Yet just as writers like Wister and illustrators like Remington created a picture of the Wild West which supplanted the 'reality' in people's minds, so can stories powerfully express the virtual reality of the organisational culture.

Time and time again, in the workplace and in ethnographic and contextualistic research, there is a need to ask how true things are. It may be that this truth relies upon, and affects, the validity or reliability of evidence. It may be that the truth people insist on how been created or influenced by knowledge paradigms or permeating ideologies or belief-systems within which people in general, or people in professional work in particular, act and reflect upon their actions.

It may be, too, that truth rests on what we have come to accept as canonically established, endowed by that epistemic authority which, through a mixture of decision and inertia, we come to accept as 'normal', particularly when knowledge and meanings are institutionalised by organisations. Much of the routine truth of daily work derives from its predictability, and this is implied in the ways in which people at work use scripts to assist and predict responses to events there.

The ETAD model seeks to explicate four of the key dimensions along which, and with the help of which, managers are able to come to a fuller understanding of their work and themselves, and, by extension, management research can elicit and systematically represent the structures and meanings which characterise the management of meaning. Overarching the experiential and the teleological, the axiological and the deontic, is *that factor of truth*. It works pervasively and 'warrantingly' through all the other dimensions. It appears when managers ask themselves whether they really know what is happening, or if they can reliably recall what happened at last week's meeting or on last year's marketing initiative.

It appears when managers examine events and states at work, and ask how they happened, what preceded them in time, what they might cause in the future. It appears when managers ask themselves what the meaning of past events, and reflections on past events, might be, what lessons about success and failure can be interred, and whether the lesson and its referent context is true.

Finally, what is true lies poised between what is and what should be. In religion, this is continual question in the context of mortality, sin, and redemption. In managerial storytelling it means that (a) managers are aware of truths actual and truths desired or aspired for, letting one sometimes serve for the other, and (b) managers are continually judging what can truly be said, or what can be represent as true, in the context of active storytelling. In chapters analysing managers' use of concepts, the frequency of criterial adjectives like 'real', 'good', and 'effective' confirm this. In these ways the dimensions of the ETAD model are affected by the *epistemic* dimension.

People often say that 'where there's a will, there's a way'. Such a sentiment characterises much decision making in management. We might turn it round to read 'where there's a way, there's a will'. Then we are invited to examine the ways in which managers often pragmatically look for means to achieve their ends, and, only when a practical or ethically acceptable way appears, does the will (say, to commit resources, time, money, skills, commitment) emerge. Such means and ends become 'real' when they are 'true', and 'true' when they are seen as 'real'. In this stance, we see a perfect fusion of the experiential, axiological, teleological, and deontic dimensions.

For this to happen, there has to be an element of *justification*. By this we might then say that 'the ends justify the means', or vice versa, implying that, although the relationship of means and ends may be experiential and teleological, axiological and deontic, its needs to be epistemic, and seen to be so, if it is to have any credibility and validity. The epistemic dimension plays a central justificatory or warranting role in the representation of managerial meaning.

Implicit in such truth is what is known and thought generally, how people (experts or novices) agree, or come to agree, on things, and what is regarded as sound and unsound knowledge, wisdom, and belief. This takes the discussion into the area of managers in general, rather than the individual manager. It moves us from the representation of meaning by the individual in storytelling (ie intra-storying) to the representation of meaning by groups of individuals in storytelling (ie inter-storying). To this issue, and as a way of bringing the numerous strands of the argument of the thesis together, Chapter 12 is devoted.

PART 4

CHAPTER 12

ABSTRACT

This chapter discusses the experiential-teleological-axiological-deontic model, and reviews the ways in which it can be extended and applied to meanings in management expressed in forms of discourse.

The model is first extended by adding the EPISTEMIC dimension, concerned with truth, legitimation, and the grounds of knowledge (or warrants). It is then further enhanced by the addition of the PRAXIOLOGICAL dimension, based on knowledge and ideology and action. This directs our attention at the context of practice (or praxis), and alerts us to the importance of changing paradigms and ideologies, norms and dialectic and consensus, and the negotiation and collaboration of meaning with which the thesis began.

At this point, the full model has been developed, with six dimensions. It is termed the PETADE model, acronymically representing each of the dimensions, the ETAD dimensions appropriately flanked by the Epistemic and Praxiological, just as in life and in the workplace.

This chapter also sets out to summarise the relationship between the PETADE model and the referential hierarchy of forms of discourse, from concept through to story. Comparisons and contrasts are noted between types of manager (particularly craftsman and gamesman managers) and between experts and novice managers, all key themes and issues in the thesis.

Summative remarks are made about the nature of ethnographic, contextualistic and constructivistic research, and the extent to which such research can successfully elicit and allow analysis of the various forms of knowledge represented in discourse. Finally, it is suggested that the thesis shares, along with the many discourses which managers create and use, the status of being a representation of managerial meaning in its own right, and an attempt more fully to understand the diversity and complexity of meaning at work.

CHAPTER 12

MANAGERIAL DISCOURSE IN THE CONTEXT OF

KNOWLEDGE, IDEOLOGY, AND ACTION

Ethnographic approaches to managerial discourse give a prominent place to the ways in which meanings are created, and how they may be exteriorised and analysed by research, in life-like settings (contextualism), and to the ways in which such meanings are socially constructed and negotiated by participants (constructivism). Implicit in understanding the creation and construction of these meanings is the need to devise an intelligible and realistic method of analysis.

In this research, such analysis has utilised two major analytical instruments, a MODEL, incrementally developing so as to include major criterial dimensions of managerial meaning, and a REFERENTIAL HIERARCHY, by means of which four essential forms of discourse (concepts, propositions, scripts, and stories) could be represented. In this way, it is argued, knowledge representation in management could be cogently investigated.

The issues and arguments have been complex. In consequence, it is the aim of this chapter to summarise them and then develop them so as to give contextual and constructivistic attention to

(a) the ways in which the experiential-teleological-axiological-deontic model may be extended to include epistemic and praxiological dimensions; and

(b) the ways in which the whole model (the PETADE model) may be said to illuminate the knowledge paradigms, ideologies and beliefs and values, and ideas about hegemony, dialectic and consensus, with which earlier chapters have been concerned and which play such an important role in the management of meaning in management.

The management process is well-known as combining ideas and applications, academic and practical knowledge. There is a continual interplay between thinking and learning on the one hand, and doing on the other, leading to the view that effective management consists of reflective practitioner thinking, as well as a realistic understanding of practicalities. Given this, it is natural to characterise management as a decision making process, with plans and goals, intended or preferred outcomes. There may be consensus about these plans and outcomes, there may be conflict.

The conflict may arise for many reasons, associated with power and authority, divergent readings of the situation, contradictory ideologies or belief systems among managers, different expectations, levels of knowledge and expertise, and thinking and learning styles. Arguably, most management is concerned with getting things done, with succeeding, and so the exercise and demonstration of

competence is paramount. This is reflected by the pervasive presence of definitions and interpretations of 'effectiveness'.

It has been suggested that 'story' is not just a natural way for people generally to express social meanings and representations in discourse, but it is an appropriate and revealing way for managers to represent their knowledge and beliefs about what they do and are. Storying is the process of instantiating personal and collective meanings into extended discourse, and this uses and subsumes other and constituent forms of discourse like concepts and scripts. It is not 'fictional' in the sense that 'novels' are, since managerial meaning is narrativised (converted into forms of script and story) in both expository (ie fact- and management-documentation-orientated ways) and narrative ways (eg stories) (see Chapters 9 and 10).

In being constructed from concepts and episodes, event chains and causal sequences, scripts and stories have much in common with the meanings and actions within the process of management. This makes stories a hospitable vehicle for revealing understanding, explanation, reflection, decision making, and time. Discussion and analysis of action mazes, in themselves and then as inferrable from stories (see Chapters 9 and 10) demonstrate this versatility.

It is important to identify those key elements by means of which such meanings are converted (concretised, instantiated, narrativised) in forms of discourse (accepting that non-discoursal forms, like images and symbols, also play their part). These elements have been identified as 'dimensions', and have been explained as *experiential* (ie what managers know, know or believe 'is', consider plausibly real in the workplace), the *teleological* (ie what managers see as the ends and means of events, by which what exists in the present, and what in the past and future, come into being causally and contingently), the *axiological* (ie

what managers regard as 'valuable', how this 'is' as a result of the exercise of values and beliefs, particularly experiences which have a 'lessoning' effect), and the *deontic* (ie what managers think of as what should be, or should have been).

These dimensions by no means exhaust what might be discovered. For purposes of clarity, other important aspects have been subsumed in these dimensions: for instance, the aetiological, concerned as it is with what causes things, has been subsumed in the teleological (preferred because of its emphasis on the ends-means logic by which managers can evaluate how they go to 'here' from 'there').

Other instances are the inclusion of pragmatic and conative aspects within the experiential dimension, even though the implication of compromise sometimes connoted by the first and the notion of willed action connoted by the second, again imply further independent investigation. An empiric dimension, concerned with the medium by means of which the experiential is expressed (eg the structure in an organisation), and translated from current mass communication theory, could also be subsumed in the experiential. Others could be attributed to the discoursal forms used by the research (not just semantic but syntactic, grammatical, tagmemic, and semiotic).

There is also the ontological dimension, concerned with the grounds of being. Although incorporated into the discussion of concepts earlier in the thesis, as a basis for explaining how and why people represent 'things' with 'names', it has been assumed that ontological aspects are implicit in the other dimensions, and that to explore them in any philosophical sense would move the focus of the research into an interesting, but marginal, metaphysical domain.

However, there are two important dimensions which do need to be added to the four already presented. The first of these is the *epistemic*, introduced already at the very end of Chapter 11. The epistemic dimension is concerned with the 'truth', 'legitimation', 'justification', or 'grounds of knowledge or belief' or 'warranting' aspects of managerial meaning and discourse.

It has received attention at various places in the thesis (see index) for several reasons : managerial thinking and learning may be regarded as an epistemic activity; managerial decision making as an activity based on the perception and exercise of perceived and tried 'truths' and socially-legitimated and normative 'fidelities' (eg on how 'reality' can be 'really' understood and represented); and managerial narrativisation may be seen as a search for 'true' understanding of oneself and one's situation.

Experience has been emphasised as the basis for many decisions and impressions in management. It often forms the basis for knowledge, and experientially acquired knowledge and meaning experience is often regarded as true and real by managers who know that their effectiveness is judged by their ability to get things done and get the right things done. Truth (or credibility) is important when managers look at events unfolding before their eyes, seek to understand them, and represent them in coherent forms of thought and language. Often such forms will be discorsal (reports, committee minutes, manuals, orders, parables, stories), and as such the causal sequences and the ways in which means and ends work within their time-frame will have characteristics of the true, real or good about them. If they do not, then arguably such forms will lack coherence, and therefore not appear true, in just the same way as their referents (ie the actual management events and states they describe or represent).

Managers attribute truth to the various ideologies, beliefs and values which they hold, and, explicitly and implicitly, such truths (or attributions of legitimacy) operate pervasively in decisions, interactions, negotiations, and storytelling. Similarly, what managers know 'is' and 'should be' depend variously on what they know, know they know, know they should know, think others think, think others think all good managers should know, think should be done, and think should have been done in the past. All these rely on grounds, some personal and idiosyncratic to the context, others generically professional and of universal application. In this way, the epistemic dimension is represented in, and interacts with, the four other dimensions.

Such interactions are revealed (see Chapter 10) when we see how the experiential and deontic dimensions affect each other in craftsman and gamesman managerial storying. For craftsman managers, the experiential refracted (ie dominated) the deontic, while for the gamesman manager, it was the other way round. Both phenomena arise as a result of managers, when narrativising, thinking precomprehensively (ie by means of a hermeneutic circle) as they move from present to past, identifying 'lessons' (ie reflecting axiologically) for 'success' or 'failure', and moving back in the storying to the present (and beyond, protentively, to the future).

Other aspects of these interactions include the ways in which all four ETAD dimensions work in craftsman and gamesman storying, and how, in the domain of the storyteller and their audience, there is a 'negotiation' between the experiential and deontic planes, and 'collaboration' between retrospective and prospective interpretations of reality.

The epistemic dimension is important as an element of the analysis of individual (or so-called 'intra') storytelling. It predicates the existence of a

set of 'warrants' which the story in its turn predicates in order to have credibility, meaningfulness, and relevance, to teller and told. Such warrants may be circumstantial (eg when the storyteller refers to specific and mutually-known phenomena, personalities, or events from the workplace providing the context for, and sometimes even the subject of, the story).

They may also be intellectual. An example is when the storyteller cites some generally accepted truth about management, eg the rationalistic and canonical contention that 'good management entails planning and control', or uses a widely-used and validated method like critical path analysis or appraisal in evaluation, or is convincing in reasoning and handling of evidence. Such warranting is implicit in the way in which managers may use valid or true information to help decision making in action mazes, and make true or valid propositional statements (or reveal similar propositional attitudes).

Truth may also lie in generalisability. Such 'general' truth will draw on the paradigmatic knowledge and ideologies, belief- and value-systems described and discussed earlier in the thesis. Critical will be what is regarded as or seen to be 'true', 'real' or 'good', particularly in terms of effectiveness in providing services and products. Arguably, experts (like experienced practitioner managers) should know what is true, however they justify it criterially. They might do this in terms of what is philosophically or pragmatically 'true', or in terms of what is simply 'valid' (ie has an ostensible coherence and convincingness in the eyes of most managers or 'us' or some other appropriate group).

Such 'truth' is changing, vulnerable to paradigmatic change, multi-paradigmatic and contestable, and affected by ideology. Environmental factors (politics, finance, and the like) aggravate this process. By that token, non-experts will

demonstrate interestingly different, and arguably 'naive' conceptions of the truth. Since both expert and novice versions are continually being converted into action, and being used to explain action, any comprehensive understanding of managerial meaning should accommodate the way in which all meaning is used in relation to action, and such action is associated with 'professional' managerial practice. It is therefore logical to suggest that another dimension, other than the epistemic, be added to the basic ETAD model. This new one needs to concern itself with the context of the others, practice.

Understanding managerial meaning takes in management practice (or 'praxis'). The 'experiential' dimension accommodates the way such meaning is usually based on what managers do and know, know they do, and know is plausible. The concrete substantiality of this is important to underpin the forms of discourse which managers use, and what they do with them. Yet such discourses emerge from a wider setting, that of managers in organisations generally, of managers in particular sectors of business and commerce or the public sector, and of managers who define themselves in relation to particular professions. It is important, therefore, to underline the way in which such knowledge representation, contextualistically and constructivistically, situates in this way.

This is the *praxiological* dimension, that concerned with the knowledge, ideology, and actions, normative and consensual, dialectical and negotiated, within the professional group with which the respondents consciously or sub-consciously identify. It will also take in the extent to which such managers resist such definitions, and how they view (and what they know about) the way in which professional roles, knowledge, and beliefs are being changed from within and without.

Praxiological factors are critical for understanding not just the setting of this investigation into managerial meaning, but also for explaining its essential dialectic. This can be seen in the way in which management as a body of professional knowledge and perceptions is multi-paradigmatic and shot through with personal and professional ideologies and belief-systems. It can also be seen as a conflictual process (eg managers and employees, line and staff, traditionalists and radicals, specialist and generalist managers, craftsmen and gamesmen).

Legitimation and normative behaviours exert their influence within this praxiological domain, which, being both pluralistic and ideographic, affects and reflects what managers regard as 'true', 'real' and 'good practice, effective management, and appropriate instances. These factors influence how people define and use key concepts like 'effectiveness' and 'quality', complete entailments in axioms and propositions, choose and use scripts which describe, routinised managerial events and practices, and represent meanings, evaluative and meta-critical, in stories.

Praxiology also alerts researchers to the pervasive importance of hegemonistic meanings within the professional paradigm. Such meanings often derive from established or powerful elites, and, as has been seen, embody a great deal of ideological authority. Kuhn-like, such hegemonistic meanings may change and fade, giving way to new. Of particularistic importance is the reaction of individual managers, and of distinct groups of managers such as those in middle management faced with revolutionary changes in their own role and the methods and rationales of their organisations.

Ethnographically this thesis has identified library management as an especially acute arena for such change, as entrepreneurial knowledge, skills, beliefs and

values, threaten to deconstruct contemporary frameworks of meaning and discourse. No researcher-led value judgement was made, or groundedly inferred, about the preferability of such change occurring (ie no partisan position was taken up as to whether such change was for the best, or, by extension, managers who adapted to such change were necessarily 'better').

Nevertheless, given the evidence from a wide range of informants, it appears that the ways in which such meanings are changing, and the ways in which succesful and unsuccessful managers are responding to such change, suggests that praxiologically gamesman managers are taking the advantage. This is already having profound structural implications for the organisation of professional work, as well as for the individual lives and job satisfactions and training needs of individual managers.

It is a change involving greater and wider internalisation by public sector managers, most of whom have hitherto been anchored to expertise and belief-systems associated with the service ideal and with scholarship and notions of free information, to commercial and entrepreneurial models, under which information is a product, to be sold and marketed in a competitive economy. Again, no facile value judgement should be made as to whether this change is for the best (say, for a democratic state like Britain, or for an incrementally developed service like British public libraries).

But no shortage of explicit and implicit evidence emerges from respondents to suggest their own reactions to this change (eg in Chapter 5 the low rating which 'marketing' gets, or in Chapter 7 the way in which students of library management regard as 'bad' things that are 'old'). In particular, the scripts and stories of the craftsman and gamesman managers are most revealing of this response, and evidence of knowledge and meaning de- and re-construction in

managerial states of change, with complex (and too often hidden) agendas in relation to the value and direction of professional work.

As a domain, library and information management is particularly interesting because of its numerous ambivalences. As a domain, it consists of and abuts upon several others (librarianship, information work, communications and media, book trade and publishing, education, advice and consumer affairs). It covers many spheres (public and academic, school and special libraries, information centres, database and software companies, and the rest, some publicly and some privately financed). Boundaries are fuzzy and contestable (eg between librarians and information scientists; or between good practice in a public library when quality assurance criteria are introduced; or between views of the effective manager as resource coordinator, subject specialist, personnel manager, or information technologist). It draws upon management, which itself is made up of many elements, academic and practical.

It is threatened with and challenged by changes of many kinds, from deprofessionalisation as a result of information technology to invasion by other and 'parallel' professions, from the need to update skills training (in financial management, for instance) to the contracting in and out of services.

Of probably greater interest still are the ways in which the paradigmatic knowledge and ideologies appear to be evolving by exposure to transforming factors into something new. Practice is leading the way here, as, in the early 1990s, the more extreme doctrinaire entrepreneurial approaches are seen to suffer from the same drawbacks as did the 'scientific' approach of classical Taylorian management theory. In particular, it is becoming clear that ways are being found to take the 'best' features of service and entrepreneurial approaches and blend them together in a workable mixture.

Individual elements are not, and cannot be, the same as they were in traditional professional paradigms. For instance, the pervasive impact of 3 E's thinking (which emphasises that local government services should be economic(al), efficient, and effective, as well as reflecting the way in which finance and accountability lie at the heart of any current conception of effectiveness) prevents any easy equation of effectiveness with the lavish expenditure of money.

For Cronin (Cronin, 1991), the direction is service reformation, where high quality of service can be designed to be compatible with customer satisfaction; total quality design, based on more effective information; asset management, from stock to goodwill, managed cost-effectively; and marketplace competition where discourse and action will be concentrated on cost centre strategies, portfolio development, and a clearer perception of role in society. In this way, one view would have it, a form of Kuhnian paradigmatic 'evolution' is taking place, a post-dialecticalism vis-a-vis the dialectic examined systematically by this thesis, in which a form of knowledge-based and ideological mutualism is becoming apparent.

Both in practice and in professional commentary, signs that such new paradigms are emerging is clear. This is particularly evident in the debate about and implementation of 'quality' and 'quality assurance'. Leaving behind statistical techniques associated with quality control, quality assurance stresses the need to perform the quality function adequately, to ensure that people can get access to services, that services are relevant to their needs and effectively respond to individual demands, treat everyone equitably, operate efficiently, and are socially acceptable (Brockman, 1991). British Standard 5750 and its European counterpart ISO 9000) have accelerated the growth of QA in many private and public organisations, and they are having implications for library and

information service, particularly in the areas of identifying and improving information quality and relevance, and introducing and maintaining procedures for the control and retrieval of documents.

The total quality approach combines the management of resources (like the cost of quality) with a total quality commitment by staff and customer satisfaction (Choppin, 1991). Indeed the British Standards Institute has defined 'quality' as 'the totality of features or characteristics of a product or service that bear upon its ability to satisfy a given need' (Ellis, 1988a & 1988b). Such a stance is likely to include product design and punctual services, as well as community access and meeting needs of individual clients. In other words, new meanings and combinations of meanings, new attitudes and values, are being adopted and shaped by managers today to define the ways in which they believe effective management will develop in the future.

Such methods are becoming widespread in learning and teaching (McPhail, 1989; Sallis, 1990) as effectiveness is being used to indicate a climate of high expectation, by providers and customers, of products and services both efficiently and effectively produced. In such a climate, the inputs and outputs from the old mechanistic systems thinking are being revitalised through an emphasis on outcomes, while at the same time the importance of performance criteria or indicators, dealing with process and financial control, are not abandoned. Indeed, it is a feature of new trends that the emphasis on outcomes for the satisfaction of customer need is matched equally by an emphasis on reliable and objective performance indicators, many of them of the kind which emanate from entrepreneurial activities like cost-centre management, ensuring departmental contribution to the profitability of the organisation, encouraging technological innovation, and identifying the value-added potential for specific information services.

Emerging therefore, it seems, is a way of working with reformulated concepts of efficiency and effectiveness which enables managers, caught in the political and cognitive webs we have discussed, to balance 'quantity and quality' (McDonald, 1990), and apply performance measurement and appraisal to 'create constancy of purpose for improvement of product and service' (Deming, 1982; Walton, 1989, 55-7). The seminal management writer Deming (Walton, 1989) advises that price tags, fear of economic loss, rigid numerical quotas, and barriers to pride of workmanship demotivate staff and reduce the achievement of quality.

Coupled with the increasing reflection on the changes which they are living through, and with the increasing recognition of the need to learn new skills and attitudes, many middle managers in library and information services are likely, in the next five years, to make a successful transition from the traditional service paradigm, through the negotiated reality of the conflictual model which we have been describing, to a perhaps even more interestingly contestable and dialectic state in which craftsman and gamesman approaches have been, more inextricably than before in the polarised model of the 1980s, fused into a newly configurational approach based on quality.

Such patterns and probabilities are fixed firmly in the praxiological dimension of library and information practice, and have, through the continuum of time, their own experiential, axiological, teleological, deontic, and epistemic characteristics which future research will possibly investigate and decipher.

These remarks are intended to bring the discussion and investigation of the thesis full circle. They are also intended to emphasise the importance of building in a praxiological dimension to any comprehensive programmatic for the analysis of knowledge representation in management.

The full model consists therefore of six major dimensions : the praxiological, the experiential, the teleological, the axiological, the deontic, and the epistemic (hence PETADE). Appropriately, the core elements are those indicated by the acronym ETAD, and these are contextualised and legitimated by the epistemic and the praxiological. This is represented quite literally by the acronym itself (with E 'epistemic' and P 'praxiological' on the outsides).

The model assists an understanding of the nature and scope of how managers represent meanings in forms of discourse. These forms themselves have been systematically presented in the form of a referential hierarchy. This argued for a hierarchical arrangement of concepts and propositions, scripts and stories, each one subsuming the previous one(s), building up incrementally to a hospitable and flexible vehicle through and with which managers could instantiate and explore their meanings.

It is necessary, finally, to indicate how the PETADE model and the referential hierarchy work together to reveal and codify the major aspects of the investigation. Knowledge representation according to the dimensions and the referential hierarchy is summarised in Table 39.

The six dimensions of the PETADE model are represented from left to right, and the elements of the referential hierarchy from top to bottom. These elements have been arranged so that under each of the headings (concepts and propositions, scripts and stories), it has been possible to distinguish 'novice' from 'expert', and, within 'expert', 'craftsman' from 'gamesman'.

- Along the experiential dimension, it is possible to see that novices reveal naivete, mimesis, cognitive dissonance, storybook knowledge, and non-reflexive (what Argyris calls 'single-loop learning') characteristics throughout

Table 39: PETADÉ model : the six dimensions
and the referential hierarchy

RH	Model	Praxiologial	Experiential	Teleological	Axiological	Deontic	Epistemic
Concepts	E	M	Partial Contingent Lacks context	Mimetic Denotative Demotic	Means-ends info & reasoning limited	Personalistic IVB definitions	Concept change & learning; canonical defs & warrants
			C { Legitimated by praxis	Connotative Hypostasises in expertise	Trad/professional to m-e reasoning	IVB system defs of prof/trad manager	Prof paradm/IVB meanings/warrants & epist'c auth'y
		G	Consensual Dialectical	Connotative Hypostasises in gen mgt	Adaptive & pragmatic m-e reasoning	IVB system defs of gen/political management	Gen paradm/IVB meanings/warrants & epist'c auth'y
			Canonically derived axioms	Referentiality & linkage canonical: inchoate in AM d-m	Causality & referentiality sketchy	Unhegemonistic IVB = linkage personalistic	Suppositional/ theory linkages, canonical logics
Props	E	M	ETADE meanings refracted experientially	Prof praxis linkage & logic & referentiality	Logic/ref'ty anchor in prof expertise	Trad/prof IVB anchor=elements & linkage logics	Service warranting of linkage logics + paradm & IVB
			ETADE meanings refracted deontically	Gen mgt praxis linkage & logic & polit ref'ty	Logic/ref'ty anchor in gen mgt opportunism	Linkage logics pluralistic & iconoclastic	Entrepr warranting of linkage logics + paradm & IVB
		G	Anecdotal & eavesdropping on the actual	Canonically sourced & 'coming to know'	Fragmented event chaining & low context-aware	Unsocialised IVB applied to untax- onomised routines	Impress'c/subj'c wt'g; eccentric st'bk life-truths
			C { Interpretative, constructivist & contestable	Prof/trad praxis meaningfulness/ routine lexicon Adaptive multi- paradm approach: inferential role	(Effective expl of routine & analysis by HADE)	Prof IVB warrants assumptive meaning knowl of routines	PETAD-referring epistemic auth'y (trad & prof)
Stories	E	M	Narrative storying, 'as if' evaluation	Storybook, low coherence, high 'as if' ostensive	Story qua story, not interpr of praxis, low info	Gen mgt warrants assumptive meaning knowl of routines	PETAD-referring epistemic auth'y (gen/adaptive mgt)
			C { Storying and SMA & HC reflection & d-m in context	Exp over deontic: prof expertise, high coherence	High storying & eval/info by SMA, exp reflection	Story vehicle for self-expression, interpr role low	Storyt'g rather than storying: low SMA & reflection
		G	Dialectically refracted	Deontic over exp: anchor gen mgt high coherence	role according to paradm & IVB	Prof paradm & IVB contestably and reflect'y used	Trad PETAD & self-glossing by SMA, refl'n & d-m
						Gen mgt paradm & IVB contestably & reflect'y used	Adaptive PETAD & self-glossing by SMA, refl & d-m

Key to Table 39

AM	Action Maze
auth'y	Authority
C	Craftsman Manager
constr	Construction
contest'y	Contestably
def(s)	Definition(s)
d-m	Decision Making
entrepr	Entrepreneurial
epist'c	Epistemic
E	Expert/Practitioner Manager
eval	Evaluation
Exp	Experiential (Dimension)
expl	Explanation
G	Gamesman Manager
gen mgt	General Management
impress'c	Impressionistic
info	Information
interpr	Interpretation
IVB	Ideological, Value, and Belief System(s)
knowl	Knowledge
m-e	Means-Ends (Analysis)
N	Novice Manager
paradm	Paradigm
personal'c	Personalistic
polit	Political
Prof	Professional
Props	Propositions
reflect'y	Reflectively
refl'n	Reflection
ref'ty	Referentiality
RH	Referential Hierarchy
SNA	Semio-Narrative Analysis
et'bk	Storybook
storyt'g	Storytelling
subj'c	Subjective
Trad	Traditional
wt'g	Warranting

the hierarchy, while experts bring greater knowledge to all stages, gamesman experts anchoring their greater knowledge in more adaptive and opportunistic behaviours.

- Along the teleological dimension, similar contrasts exist, novices showing limited skills with means-ends and causal analysis and often interpolating subjectivistic connotations and instances, while experts demonstrate surer decision making and discourse-handling skills. Differences of the kind investigated fully in Chapter 10 characterise the craftsman and gamesman approaches to and uses of the forms of discourse, particularly at the level of script and story.

- Along the axiological dimension, the difference between novices and experts is quite striking, as the first tend to reveal lay (ie non-professional), derived (ie influenced by exposure to canonical knowledge), or idealistic belief- or value-systems, while experts bring complex mixtures of professional and personal ideologies, belief- and value-systems to their use of discourse.

- Along the deontic dimension, novices tend to show canonical features. This means that they tend to represent what they have read, or been taught, to accept as desirable. Often, particularly if based on management literature, theirs is a rationalistic view of what managers should be doing at work. By contrast, the knowledge of the experts is much more socialised into praxiological norms and tested wisdoms (these combine knowledge and values or belief-systems), and rooted firmly in the deontic and teleological knowledge of managers who exercise precomprehension and retrospective action-maze analysis regularly. That said, there are contrasts between craftsman managers, who tend to be reactive, and gamesman managers, who tend to be proactive. These are

contrasts of traditionalism and innovation, the spirit of enterprise, and career anchors.

The extent to which each dimension, as it appears, draws on others is critical for an understanding of the organic and inter-penetrating character both of the model and the referential discourse and empirical milieux which it represents. For instance, teleology represents the events and characters and states of the experiential, and at the same time represents a way of organising and making sense of the experiential through time and by reason of causality and contingency. Similarly, what managers think should be so (the deontic) is an actual or hypothetical version of the experiential, since it is only possible to know what should be done by drawing on one's knowledge of things that happen, successfully or not.

To these must be added the epistemic, the major characteristic of which are (a) that novices tend to warrant in more impressionistic or storybook ways, whereas experts warrant from experience and in the light of their understanding of the ETAD dimensions. Legitimation, however, is not unitary, least of all in a multi-paradigmatic domain like management with the ideological and dialectical characteristics it possesses.

In consequence, at say the script and story levels of the hierarchy, warranting by craftsman experts draws on the perceived 'truth' of their roles as specialists in a service the true 'goodness' or 'value' of which lies in its service ideals and free availability, while warranting by gamesman experts draws on generalistic managerial knowledge and values, on adaptive and multi-

paradigmatic ideologies, on finding epistemic fidelity in affiliating traditional library values to a political environment.

Praxiologically, the novices' understanding and usage of key concepts is partial, as we should expect, derivative (from reading and canonical teaching), and demotic (ie with a tendency towards popular or lay parlance and naive semantic networks). On the other hand, expert usage is legitimated by practice, susceptible to changing de- and connotations, actively and contestably collaborative, and assertive in creating the diversity of meanings by which the social reality of management works. The presence of the ETAD model is strong throughout expert discourse forms in this dimension, and is characterised by being interpretative, contextualistic, and constructivistic.

These, by no coincidence, are the essential characteristics of the ethnographic approach employed by this research into the praxiological - and other - dimensions of managerial meaning. This confirms an incidental claim of this thesis, that managerial meaning is often best understood by using methods which managers can themselves understand, or at least apply.

Over and above that, the more substantial claims of this research rest on the point that the meaning of management is the management of meaning. From that, it is necessary to devise a coherent and effective way of representing the social realities within management.

Critical to this task is the development of firm and clear connections between knowledge, on the one hand, and beliefs and values, on the other, so that the meanings elicited and analysed derive from both areas in common. Critical also is a framework or programmatic, so that appropriate forms of discourse can be

identified and analysed, and their relationships examined and a coherent and comprehensive model of managerial meaning constructed. It is essential that such a framework (the referential hierarchy of managerial discourse) is convincingly brought to work in tandem with such a model.

The findings of such an investigation must take full account of two other major issues. The first concerns the way in which managers come to know, or learn to be managers, and progress from the status of novice to that of expert. The second addresses itself to the pragmatic realism in management which demands that attention be paid to the negotiated or contested realities and meanings which form the common currency of practice.

Finally, such research, if it is to be meaningful, must devise appropriate, valid and reliable methodologies for the elicitation, organisation, analysis, and presentation of knowledge representations. The ethnographic approach, incorporating the principles of grounded theory, and emphasising contextualism and constructivism, have, it is believed, provided such a firm foundation.

This current research, now it has been represented as a discourse in its own right, has taken on the form of a story, which, in the style of storied meanings here, bring together fact and fiction, narrative and evaluation, introspection and self-display, retrospection and forecasts about the future, decisions and knowledge about the achievement of goals. This thesis is now part of an ethnographic domain where negotiated and collaborative meanings, idiosyncratic and consensual, individualistic and hegemonistic, continue to play an active part. A final claim made by the researcher would be that the parts being played are a little easier to understanding, given the existence of this research.

PART 5

CONCLUSION

PART 5

CONCLUSION

This research has been, in effect, an investigation into what appears to lie below the public surface of meaning. The process of management is often shown as one where meaning is clear to see in the decisions and policy making of managers. It is often seen as a domain where people know what they mean and where they get things done without dwelling on subtle semantic nuances. And yet much of the most important burden of managerial meaning is to be found when assumptions and tacit knowledge are examined.

These 'levels' of meaning form an important aspect of any professional ecology, and management in library and information services is no different. This is a domain in which substantive knowledge and ideological change has taken place over the last decade. At the heart of such change has been what managers regard as effectiveness.

Effectiveness is a pervasive concept. It has many manifestations (financial, supervisory, decision making, impact on community), and is a truly contestable and negotiable idea for managers at all levels and stages of their careers. It has many synonyms, and some of them, like performance and quality, having taken on distinct paradigmatic life of their own, with their own unique applications and advocates.

Paradoxically, effectiveness appeared to be a concept which everybody appeared to know all about. Only when formal and systematic investigation began did differences emerge about degrees of knowledge and information, about dominant thesis meanings (hegemonic meanings) and consensus, and ideological connotations and interpretations. Increasingly in the research, it emerged that the meaning of effectiveness was representative of the management of meaning in organisations, and a crucial developmental, organisational and personal issue for the present time in professional life.

At the same time, it was essential to unlock the paradox that everybody appeared to know what effectiveness was and yet no comprehensive account of that meaning had been made visible. Such an account would, arguably, go far beyond the axiomatic or canonical statements about effectiveness in management textbooks and annual reports. It would have to take account of the pluralistic and multi-paradigmatic knowledge and meanings which actual managers had, or appeared to have. It would, moreover, have to accommodate the many personal and idiosyncratic meanings which managers had and with which, consciously or not, they organised their day-to-day decision making.

In consequence, a systematic ethnographic and hermeneutic approach was developed. This was able to emphasise the ideographic importance of the evidence, that is to say the way in which explanations could be found only or

mainly through gaining access to the subjective and cultural knowledge and values of the subjects under study.

The methodology also needed to be hermeneutic, which is an approach which concerns itself with 'texts' and, by extension, meaningful human behaviour. This aspect of the approach led naturally to an examination of the forms of discourse used by managers to express their understanding of meaningfulness in the workplace. Through an elicitation and analysis of their conceptual and propositional knowledge, it became possible to represent the contestable and indexical nature of private and tacit meaning. From that, inferences and generalisations became both feasible and valid.

The way in which managers behave at work appeared to be crucially influenced by the meanings they used and attributed to the events and states around them. They were using forms of discourse both to represent their meanings and to reflect upon them. This is the truly indexical position, where people vary their actions according to how they interpret their situations.

It was natural therefore, given the paradox that everybody seemed to know but no one had really told, and given the undisclosed depths of indexical knowledge and meaning that appeared to reside in this domain of management, that to concentrate on finding ways in which valid and reliable evidence could be elicited was an essential task for this research.

The seed for taking an ethnographic and hermeneutic approach lay in the freedom with which managers had talked to the researcher over the years before the research began. Things were told then which stayed hidden in formal situations like meetings and formal communication, from letters to textbooks. Interestingly, the 'obiter dicta' or remarks in passing were often more

revealing of the hidden areas of assumptive knowledge and meaning than were the ostensive or intended statements with which managers thought they were communicating their meaning.

That said, care and thought had to be given to the possibility that systematic research into these deep but elusive meanings could come unstuck simply by reason of research taking place. Methodologies like interviewing and participant-observation (and, by reason of the researcher 'inhabiting' the domain of his respondents, this research was to some extent that) are in danger of creating 'Hawthorne effects'.

It is argued that these effects were reduced as far as possible by looking at an issue which managers had proven a widespread and spontaneous interest in (namely, what makes a 'good' manager, what do I regard as 'success'), and in ways which respondents found natural. These ways were, methodologically, by forms of interview and storytelling, and, substantively, in forms of storying. The wealth of evidence which arose through conducting research in this way appeared to confirm the validity of this approach.

This thesis would claim that very little systematic research of this type has been carried out in the domain of library management, and that no attempt, before this, has been made to look at knowledge and meaning using the discourse-based approach with its emphasis on the construction and negotiation of meaning. Little research, moreover, has been carried out into the knowledge paradigms of library and information work, and most of what has appeared has concentrated on the generalised multi-disciplinarity of the domain, or on specialised linguistic or semantic relationships in information retrieval.

It would argue, too, that no attempt so far has tried to incorporate the major issue of ideological change into such an investigation of knowledge and meaning, although important research into contestable meanings and the social construction of reality has taken place in the domain of sociology. In the thesis, this dimension is examined in general terms by chapter 3 and then empirically by what is said about craftsman and gamesman managers.

Similarly, much valuable work has been conducted by social and cognitive psychologists into the way people conceptualise and retrieve from memory, but only in recent years, through work like that by Smircich and Morgan, Wilkins and Legge on organisational cultures, are we able to see a holistic approach to the social and cognitive milieu of managerial meaning.

The claims of the present thesis, then, are based on the need to bring these distinct and diverse approaches together into one coherent whole, and to find naturalistic ways in which evidence on respondents' representation of meaning can reliably be recorded and organised.

It is further claimed that the coding and pattern-matching approach implicit in Glaser and Strauss's 'grounded theory' proved invaluable for categorising and prioritising the wealth of evidence, oral and textual, which formed the empirical base for the research. Brought together with extensive reading in many relevant and cognate fields, and with hypotheses and aprioristic insights held both by the researcher and inferred by the researcher from respondents, it was possible to build up a valid picture of the way in which meaning and knowledge are represented in the workplace. It is, indeed, a contextualistic and constructivistic interpretation of managerial understanding.

Essential to these claims is the matter of how generalisable the findings are. Characteristic of ethnographic research is the extent to which individual findings are ideographic (ie emphasising the actors' subjectivity) and particularistic. Only by induction, from example to general principle, can any plausible claims be made about the representativeness of the evidence to managers of this kind in general, and even managers in general.

However, it may be said that the referential hierarchy is both comprehensive of the forms of discourse which managers use (concepts, propositions, scripts, and stories) and referential in referring to the pragmatics of the workplace. It may also be said that the dimensions discovered in the PETADE model are central to an understanding of how managers represent meaning. The experiential and teleological, axiological and deontic dimensions have proved, above all in storying, to be alert to the key things which, cognitively and meta-cognitively, concern managers when they talk about their work. 'Story', in itself, has been represented as including fact and fiction, narrative and commentary, rhetoric and reflection. The four dimensions are set within the warranting framework of the epistemic and praxiological dimensions, referring us to the paradigmatic and ideological 'facts' or truths of the workplace, which managers work with every day of their lives.

It may be suggested also that, at this time in the development of library and information management, a central strand, political and social, is the debate between traditional professional values and more generalistic and entrepreneurial ones. The craftsman-gamesman discussion aims to represent that.

Applications of this approach are many. Already in the thesis, areas such as supervision and appraisal, the management of stock and databases, training and evaluation have been cited. The PETADE model approach enables fuller

understanding of 'macro' (or organisation-wide) processes like decision making or socialisation or management styles, as well as 'micro' (or individual-centred) processes like learning a new skill or coping with role conflict. Several areas of management have been identified for further research (eg the oral tradition, storying at levels other than middle management, and further applications of action maze and consensus analysis).

Finally, any research of this type may be regarded as a contribution to, and an extension of, the wealth of discourse on discourse which already exists. It forms an ethnographic and indexical component in its own right, becoming part of the interpretative apparatus with which researchers and managers attempt to understand their own environment, and understand the ways in which they construct meanings there. It is a modest hope that, as a piece of research, this thesis may contribute to a closer relationship between academic and practitioner management, and be regarded as useful as well as interesting.

PART 6

APPENDICES, BIBLIOGRAPHY, AND INDEX

APPENDICES

APPENDIX I

Kinds of knowledge

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Kinds of Knowledge

Kinds of
Knowledge

Stuart Hannabuss
RGIT, Aberdeen

Introduction

27

It is often said that data exist all around us and, when we take an interest in them or they impinge upon us, they become information. When we organise information into meaningful shapes, it becomes knowledge. These meaningful shapes may be subject disciplines, into which academic knowledge is usually divided, or a coherent set of meanings which we hold about the way home, the reason we vote Conservative, or what we like about each other.

We know that we come to know, and we come to know that we know. Things half-understood, or wholly misunderstood, become clear by stages or suddenly. They may be knowledge about putting on a tyre or baking a cake, understanding why Alan blushed when we praised him, being able to translate a sentence into Greek, or being able to determine the significance of an analysis of variance. Our knowledge consists in part of knowing that we know, or have come to know — in other words, meta-knowledge.

Two Kinds of Knowledge

The kind of knowledge we are taught to respect is academic knowledge. We speak about book-learning, and customarily admire those who attain high achievements at school. Having written a book on a subject makes one an expert. Experts are expected to have sorted out the wheat from the chaff, and to be able to decipher, clarify, elucidate and demonstrate that they know. Yet even when things seem so clear, we can see that there are many types of such knowledge. The knowledge that gets a student a first-class degree may be a kind of intellectualism which lacks a certain applied intelligence.

Advice given to would-be interviewees often emphasises the need to come across as intelligent rather than intellectual. Programmes on television celebrate intelligence, quick-wittedness, an ability to remember facts, work out anagrams and mental arithmetic, spot a quotation, answer questions under pressure about the works of John Donne or Agatha Christie. Here there is clearly a type of intelligence at work different from that which merely passes examinations.

This can be taken further. The kind of knowledge which is a “knowledge that” knowledge stresses the propositional character of knowledge — “The man knows that he will die at dawn”, accepting his knowledge of his certain fate. On the other hand, there is a “knowledge how” kind of knowledge, as when we say “The woman knows how to hammer a nail into the wall”. A distinction seems to be made here between propositional and practical knowledge, and it disregards any context, academic or intellectual, or otherwise. “The professor knows how to decipher Egyptian hieroglyphs” is as convincing a linguistic statement as “Cave-men knew how to make fire”.

This distinction between propositional and practical knowledge seems to be

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reflected in the larger distinction between academic knowledge, on the one hand, and "street knowledge", on the other. Street knowledge is that knowledge which enables us to get by on the bus, buy food in shops, hold casual conversations in pubs, and share a frame of meaning with other people in everyday life.

It would be a mistake to think that street knowledge is less complex than academic knowledge, despite the appearance that academic subjects often perplex many of us. The linguistic idiosyncrasies of many everyday encounters, particularly those which we see but do not understand in any depth, can be as impenetrable as any textbook on a subject we have not studied. More likely, the two kinds of knowledge, academic and street, have different kinds of complexity — a complexity of ideas or terminology and a complexity of referentiality, respectively.

Whatever the two kinds of knowledge have in common, there are many differences. These differences account for the first major contention of this article, that they exist side by side and that our knowledges are made up of varying amounts of each. There are times when one or the other dominates. The second major contention is that knowledge-handlers, which is what people are, can move from one mode to another depending on purpose, context, or role.

Uses of the Two Kinds of Knowledge

If we draw on both kinds of knowledge, and move from one to another in this way, then we should have a simple way of representing the different options. This is possible by using a knowledge table, as shown in Figure 1.

Figure 1 represents schematically the two kinds of knowledge and their possible interaction. We may characterise it in this manner. Academic knowledge, or the formal kind of knowledge we associate with college or university or, better still, that theoretical area of knowing represented in books about practical subjects like management and computing, may be regarded as "high" or "low".

Discourse, in conversation or a book, can be highly theoretical by reason of its subject, or its treatment, or both. It may, on the other hand, be low,

		Academic Knowledge	
		High	Low
Street Knowledge	High	I	II
	Low	IV	III

Figure 1.

in the sense that the theoretical aspects of the subject may be treated in a way accessible to ordinary or lay readers. Popularisations of science come in this second category, as do popularisations of management practice, as in *Making it Happen* by John Harvey-Jones. It is possible, of course, that some subjects cannot be mediated in a low way because of their complexity, or esoteric nature, but many can.

Traditional academic life stresses category IV, in that it values formal theory over street knowledge. An example of this in the field of management is in the vast literature on organisational theory, replete with abstract models, systems and *a priori* paradigms of organisational behaviour. It may typically be represented in management textbooks on classical management (Taylor, Fayol, and the rest). In such works, street knowledge is limited. In this context, street knowledge is practitioners' knowledge, highlighting a problem to which this article will return, that of the difference, and arguably the conflict, between the uses and meanings of management meanings in these two domains.

Street knowledge can be characterised in this manner too. We have already seen how forms of street knowledge, such as practitioner knowledge (that picked up and used on the job, say, by managers day to day in the workplace, consisting both of "knowledge that" and "knowledge how", of knowing about things and having values and beliefs and feelings about them too) can operate in various ways. The emphasis can be high or low as, respectively, when practitioner knowledge or "praxis" is dominant in a practical guide to marketing for busy managers, or when a theoretical model of marketing principles is presented for patient academics. It goes without saying that the approach taken by writers, and the expectations and skills of users, influence this transaction. It can also be said that the same written or spoken discourse can prove theoretical or practical in different contexts.

There appears to be a dialectical relationship between the two types of knowledge, even when we bear in mind that the same discourse can be either or both depending on context, and that one can change into the other very easily. For instance, a theoretical statement about the motivation of personnel might acquire practitioner knowledge status if accepted as a useful illumination of a situation being handled by a manager at the time. A Theory X — Theory Y view of human behaviour at work can thus be transformed readily from theory to praxis.

Nevertheless, the assumption of the knowledge matrix is that a certain degree of mutual exclusivity does apply between the two kinds of knowledge. If academia stresses category IV, then practitioners tend to stress category II. Management is one field of several where the doing aspect and the thinking aspect are frequently separated and where, in institutionalised forms, participants in that knowledge domain regard their constituent knowledges as drawing on two traditions of theory and practice. In fact, advocates of one kind of knowledge may tend to depreciate the status or claims of the other, as when busy managers decry the emptiness of much textbook learning or claim that teenage students cannot possibly understand management until they have done a job of work in the world for a while. At the same time, academia complains that their

colleagues, in practice, underestimate the value of research, and the point of equipping entrants to the profession with the necessary foundation skills and attitudes.

Knowledge and Most of Us

Most of us tend to inhabit category III or feel that we do. Unless we are particularly disingenuous, most of us would acknowledge how limited is our knowledge of academic knowledge, and our claims there, and at the same time the limitations of our street knowledge. However we interpret that street knowledge, particularly if it is practitioner knowledge, many of us would be modest about it. Arguably, for many people, experience of work and the "university of life" would probably entail our laying claim to larger shares of street knowledge than any other kind. If we give this street knowledge a specialised meaning of intuitive and insider knowledge of a particular subculture (say, an organisation), then our claim to street knowledge itself grows tenuous.

Most of us are guessing about the rules of the system, trying to work out how to manage the unmanageable, asking unanswerable questions about why certain people get on and others get tragedy heaped upon them. Success and good fortune are particularly mysterious commodities, as people acknowledge when they say enviously (of someone else) that they do not know how anyone like that could achieve what they did. It is as if something mysterious is eluding the speaker. There is an enigma, free from the constraining orderliness and consolation of organised knowledge.

At the same time, many of us can move at will, or are driven by circumstance, from category III into another category. In fact, although it could be said that most of us settle in category III, there are large parts of the time when we inhabit the others, particularly II and IV. Much of the work in organisations, big and small, can be regarded as mixtures of academic and street knowledge characterised by categories II and IV.

It is even possible to move from II to IV or vice versa: high practitioner knowledge, as shown by an experienced manager (II), can lead to a need for theoretical corroboration or underpinning, to an investigation of theory to enlightenment and intellectual challenge (IV). Similarly, a theoretical beginning, as when a manager, supervisor or researcher has an *a priori* idea (e.g. "I wonder if all machines would behave in that way, given those circumstances?"), may lead to empirical investigation and testing in a practical setting (IV).

The Elusive Cell

Category I has not yet been discussed. This is the one in which academic and street knowledge are both high. For many practitioners, in professions like management and librarianship, this is an ideal state of mind, a juxtaposition of theory and praxis working in fruitful partnership. It predicates a continuing cross-fertilisation of ideas from one domain to the other, and is demonstrated by few people in any profession. This is partly because of circumstances which tend to polarise researchers and theoreticians, on the one hand, from practitioners, on the other. A good example of this is the field of education, where educational research, though of proven utility, is often considered remote and useless by people in the classroom.

The best writing on management demonstrates the way in which marriages between theory and practice can be made. In much of Drucker's work we see this, and in writers like Burgoyne, Stewart, Kotter, and the "excellence" gurus, Peters and Waterman. The proliferation of ideas, many drawn from speculative or theoretical areas, is not held back or down by the clear desire to root the ideas in practical applications and situations. At the same time, the specific and parochial and unique situational characteristics of the world of work are used to illustrate general principles, and generalised from in ways in which readers can begin to construct theories or frames of meaning which order and make sense of the chaos of their own lives.

The challenge is to operate ever increasingly in category I. Yet to do this effectively, a further dimension to the knowledge table is required, that of knowledge about knowledge, or meta-knowledge.

Knowledge about Knowledge

When we come to know something, it tends to make us proud of ourselves. Our self-awareness changes our self-concept. We know we know. We know that we have come to know. We are in a position to reflect upon the knowledge we have come to know. It is this reflectiveness that is crucial to meta-knowledge.

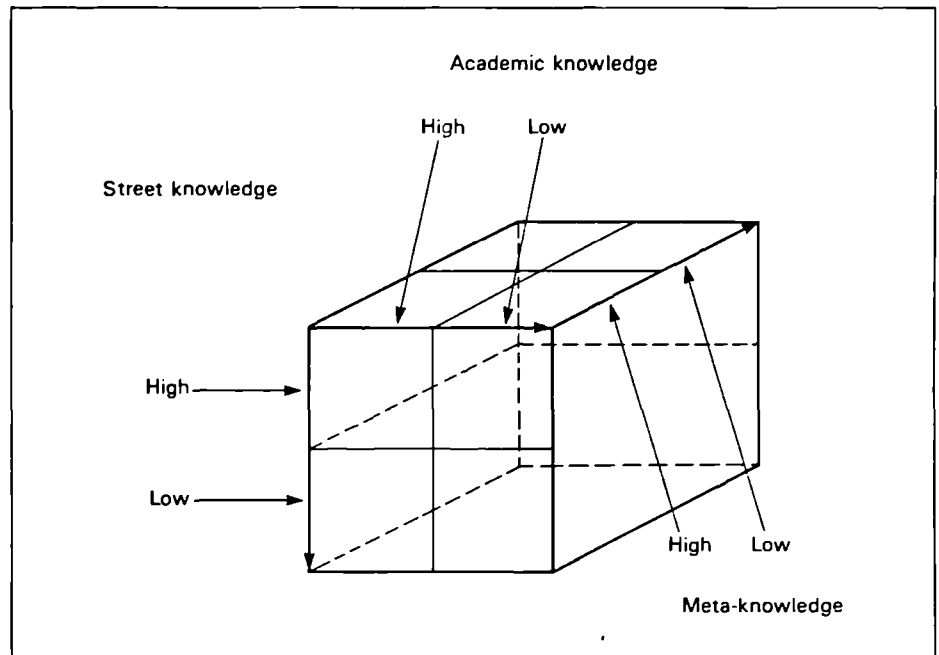
Reflecting on what we know, and how we have come to know it, is a crucial and on-going stage in all effective experiential learning. We call it experiential because it is knowledge that builds up through engaging in the experience of doing and investigating in a self-aware manner. We do something, reflect upon it, evaluate it, ask ourselves whether we did it in the best way, if other ways are possible, what we ourselves have learned from the experience, what we think of ourselves as people who have succeeded or failed to do it. Upon these foundations further learning and knowledge become possible.

The knowledge table needs to be extended into a third dimension, so that it now begins to look like a box (Figure 2). The third dimension is that of meta-knowledge, and this, like the others, has high and low points. The diagram shows these dimensions clearly.

From this, it is possible to start describing the types of knowledge, academic or street, *and* the kind of meta-knowledge at work. For instance, former category II (high street knowledge, low academic knowledge) can have a high meta-knowledge aspect, which may indicate that the knower (1) accepts this mixture of knowledge as highly appropriate for what s/he is doing, or (2) is aware that it is a flawed mixture and needs changing. Alternatively, former category IV (low street knowledge, high academic knowledge) can have this extra dimension, with similar reflective results. It is important for the knower to examine what his or her knowledge consists of, how s/he feels it matches the knowledge needs of the situation, and what s/he knows about what s/he feels about the knowledge s/he has and has not used.

Meta-knowledge can be high, as in both these cases. It can be low and, in the manner of a Johari Window, can operate so as to obscure the self-knowledge any knower has. Limited knowledge of any of these states, high or low, academic or street, can induce little change, while alert knowledge will tend to induce

Figure 2.
Diagram of Knowledge
Matrix in Three
Dimensions*



either strong reactions of change or determined inertia. In other words, if the knower knows that what they know is perfectly adequate, this can leave them accepting the *status quo*; while knowing that it is not can impel and change, based on a reflective re-evaluation of the knowledge, its effectiveness, and its appositeness for the situation in hand.

Category III, where it was argued “most of us” live, is a particularly active area for these kinds of meta-knowledge experiences. This is partly due to the fact that, though many of us “live” there, we are continually moving out from it to other categories and coming back again in a changed state. Alternatively, it may be that, though we know that we live there for many of the roles we play, in other roles we inhabit category IV, II, or even I. This reaction to inhabiting category III implies a high meta-knowledge state.

Finally, it is of course possible to have high and low meta-knowledge states for category I. Here, arguably, meta-knowledge is most active, or potentially so, because the mixture of academic and street knowledge is itself richest. If we accept the assumption that a high degree of these two kinds of knowledge shows itself in highly effective managers, and the second assumption that good management shows itself in reflective behaviour, then it is fair to argue that the meta-knowledge dimension of category I is going to be very active indeed.

Typically, then, managers in this category are able to avail themselves — having successfully in a given situation or even generally, combined theory and

* Thanks go to Mary Allard for her help in drawing cubes.

praxis — of the different vistas of knowledge, the different areas of expertise and insight, intuitive and ratiocinative, objective and subjective knowledges that are implied as being present. We may add to this the likelihood that there will be times when such a manager may not know s/he is there, or feels that s/he is falling away from such a state, or is struggling in vain to get back there for some problem-solving or decision-making task.

In this event, we may suggest that meta-knowledge applies supremely: it asserts that knowledge states are always mobile and that we move in and out of them; it asserts that knowledge, even when coalesced in apparently powerful ways, has to be held in delicate balance if it is to achieve its purpose; and it asserts that the very knowledge we have of our own knowledge states is itself in a state of flux. And with this we have a fourth dimension.

Conclusion

A famous proposition in psychology suggested that seven was a magic number; that, in other words, we could not handle more than seven things simultaneously. An examination of R.D. Laing's famous self-regarding poems in *Knots*, where "he knows that she knows that he knows. . . ", appears to corroborate this notion. It is possible, in this way, to suggest extending the knowledge matrix to other dimensions, and certainly to recommend an exploration of the fourth dimension which we have just discovered.

But the intention of this article is less speculative. It has suggested that there are two major kinds of knowledge, and that a third kind of knowledge informs us about the other two. For practical applications, there are many, if we consider people who work in and with information, like librarians. They know where knowledge is to be found, and with a little bit of trouble can elicit what enquirers know and want to know. It is all too easy to assume that knowledge is simply organised knowledge, and that the knowledge is of one kind only.

Making the primary distinction between academic and street knowledge affects the perception of the knowledge sought (the content characteristic of the knowledge) as well as the way in which the knowledge can be sought and mediated or explained (the procedural characteristic of the knowledge). These factors can have very practical effects on the ways in which librarians help people in reference interviews and design help screens and search protocols in bibliographic databases and online public access catalogues in libraries. In other spheres, say management generally, where the knowledge that people have in organisations is a complex mixture of theoretical and practical knowledge, it is useful to distinguish between them for particular tasks and roles.

Finally, there is a personal or reflective dimension. All knowledge known by knowers is, in part, knowledge of that knowledge. The meta-knowledge dimension is closely associated with that self-awareness that makes us effective and sensitive human beings, at work or elsewhere; and, in professional domains, it ensures that our exercise of knowledge, through being reflectively experiential, is of the most appropriate kind. There is another story of what is regarded as appropriate, for our judgement and valuation, for whatever reasons we may

have (honest and dishonest), which takes us into a moral dimension, or into a dimension of subjective knowledge. If we are to represent reality truly, this has somehow to be incorporated into our matrix of knowledge.

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APPENDIX II

Knowledge paradigms and change

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KNOWLEDGE PARADIGMS AND CHANGE

by Stuart Hannabuss, *School of Librarianship & Information Studies, Robert Gordon's Institute of Technology, Aberdeen.*

There is an appealing and rather gnomic rhyme which asserts four positions about knowledge. First, that he who knows and knows that he knows is wise, follow him. Second, that he who knows and knows not that he knows, wake him. Third, that he who knows not and knows not that he knows not, is a fool, and so shun him. And fourth, that he who knows not and knows that he knows not, and so teach him. Without even going as far as describing or defining knowledge, we are already made aware that it is something which encourages us to be self-aware, and that it is something the presence or absence of which in ourselves and other people has a clear effect upon our attitudes and behaviour.

Being knowledgeable amounts to an expertise in a subject domain, such as being highly qualified in some academic discipline. Having knowledge can entail having "been there", having "gone through it", like knowing what it's like to fight in war, to have sex, to know what's what. Knowing is arguably a state of power as political and organisational status might derive from and depend upon it. It also suggests access to a body of information or data. Such access is not merely passive, since a state of knowledge implies mastery over diverse information. It implies a process of ordering, of having attained the position of being able independently to demonstrate knowledge through acts (e.g. giving orders, making decisions, explaining, empathising). Knowledge also suggests that the holder can distinguish between true and false, valid and invalid information and knowledge. It predicates an ability to associate meanings and significances with entities in actuality, and to accept the notion that truth can lie beyond sensory experience. Knowledge which can be established without empirical evidence is called a *priori* knowledge, and the process of reasoning with its search for epistemic truth characterises such propositional knowledge. The process of knowing leads to other observations, one important one being the distinction between knowing and believing, and another being the distinction between knowing how and knowing that. All these dimensions operate actively when we consider what knowledge is, as entity and process (1), and encourage us to acknowledge how metacognitive, how emphatically self-aware, a study of knowledge must be.

One major feature of knowledge, in most situations and particularly those involving instruction and debate, is that it is shared (2). This communality of knowledge suggests not only external necessities like linguistic and circumstantial nearness but also factors like (a) compatible prior experience and expertise, (b) motivation and curiosity, and (c) the attribution of value or credibility to our interlocutors. It may be, too, that such shared knowledge can demonstrate how a particular group

thinks, or believes how it should think. In most groups of this type (e.g. academics and researchers within a discipline, practitioners in a profession) powerful sets of mind build up. Such sets contain both knowledge (such as the objective knowledge of chemists about chemistry) and attitudes and expectations (such as the standards of professional behaviour chemists expect of chemists, say, with regard to peer approval and the publication of original research). In this way group norms exert strong influence on what participants do and think, and indeed condition initiates and apprentices through programmes of instruction and other rites of passage into accepting these norms too. And so it is that professions articulate standards of ethics, ostracise deviants for dishonest behaviours, and exert pressure on the aspirations and self-concepts of group members. Recognition is one major component of this self-concept, and such groups can give or withhold it with life-giving or life-threatening consequences.

And so it is relevant to speak about paradigms, defined classically by Kuhn as "universally recognised scientific achievements that for a time provide model problems and solutions to a community of practitioners" (3). He added that such paradigms also stood for "constellations of beliefs, values, techniques, and so on shared by the members of a given community". Paradigms might also play a problem-solving or rule role in illuminating ways in which problems in the field might be tackled and solved. This conception posits a community of people involved in a similar field, what he calls "a disciplinary matrix", all separate but all bound together. As such we can visualise them as representing a set of beliefs, values, and techniques. Knowledge is therefore seen as something accumulated and consensual, with a truth system implicit in that shared knowledge. This of course can be substantive (i.e. concerned with content) as well as procedural (i.e. concerned with methodology, e.g. "proper" ways of conducting psychological or biological research). With time, anomalies appear in the state of knowledge, build up to a crisis (e.g. where reputable practitioners can no longer go on believing the traditional paradigm because of the cogency of contrary evidence), and create a revolution, out of which emerges a new paradigm. And so a cyclical pattern characterises the sociology of knowledge.

Examples often cited include the Darwinian revolution and the changed conception of God arising from the "Honest to God" controversy. As a result of these changes, not only does the state of knowledge change but the community itself (and its self-concept and its sociological structure) changes too. In the field of information studies at the present time, this is happening with the re-write or re-design of the training template from "librarian" to "information manager", and the broader change in society (Alvin Toffler's "third wave" notion of the post-industrial society) writes this large. Having said this, we must accept the need, in discussing paradigms, to recognise the impact upon knowledge of factors beyond the boundaries of the group. This characterises

the paradigms which may be said to appear in fields like sociology (4). There we find a multi-paradigm subject (5) where there are a number of views about reality and about the reality of knowledge. To exemplify this we might consider the deeply disparate conceptions of society (and of the purpose and manner of studying society) represented by Marx, Spencer, Durkheim and Weber. For these, respectively, there was emphasis upon class structure and struggle, societal morphologies, social cohesion and the collective conscience, and types of action (particularly rational action). The multi-paradigmacy is reflected, too, in the pluralistic character of many of the key concepts, like "community", "authority", and "alienation", as well as in the conceptions of concepts which in themselves are used to research and explain the subject (like "theory", "explanation", and so on). Different models, like exchange or conflict models, have influenced the ways in which sociologists have described and delimited and interpreted their subject, and the ways in which they have cared to attribute value or its opposite to particular views, theories, and methods of analysis.

An important distinction needs to be made between science and social science in terms of the ways in which they explain themselves. Science devises theories which play two key tasks, first to provide intelligibility ("they must explain the phenomena") and second to provide generality ("they must increase our predictive power"). (6,7,8) Explorations are of a deductive-nomological type, that is they (a) seek to deduce from observed instances general hypotheses and laws, and (b) in seeking such laws can be called nomological. So the behaviour of chemicals under certain conditions conform to expected expectations, and these confirm (or explode) such generalities. Sociology, on the other hand, generally has no systematic theories which express themselves in such formal terms (e.g. in the form of mathematical formulae), and many analysts and practitioners would argue that the study of sociology entails observing the complex and multi-dimensional behaviours of men, and their interactions and mutualities, and that such scientific modes of explanation are marginal. This is, of course, not to deny that disputes do not occur in science, and that alternative inferences and interpretations cannot exist. (9,10) Indeed, without them, the Kuhnian cycle would not occur and science would remain static.

Part of the multi-paradigmacy associated with the social sciences derives from their intrinsic nature as bodies of knowledge. As bodies of knowledge they are knowledge about knowledge too, and as such demonstrate the capacity to sociologise about themselves: to that extent there is a sociological dimension to all knowledge, and, as Wolff (11) argues, all areas reveal both immanent and transcendental interpretational levels. But that said, the multi-paradigmacy derives from two other major directions: first, the fact that many are multi-disciplinary, and second, the fact that there is often a divergence of value-system and approach, and often register and lexicon, between theorists (e.g. in academe) and practitioners.

The multi-disciplinary nature of such subjects as information management and cybernetics and management itself is self-evident. Information management draws upon subjects as diverse as information retrieval and computer science on the one hand, and social psychology and accountancy on the other. The others are equally harlequin in terms of knowledge base and assumptions, and as a result juxtapose the pluralistic denotations and connotations of several lexicons, a plurality of elements drawn from both objective and subjective knowledge domains, and divergent assumptions about explanation and proof, truth and validity. Change is not just induced as a result of the epistemological plate tectonics between these different areas: it also arises from the permutations that occur between the subjects (e.g. an increasing emphasis upon quantitative methods and statistics in the teaching of management). Such changes are accelerated by the market requirements of educational courses and by change in circumstances: for instance, in a multi-disciplinary subject like media studies, the swift changes and developments in telecommunications (e.g. the introduction of cable and the possibilities for satellite) rejuvinate the instructional programme because it alters the knowledge paradigm of the experts running the courses. The boundaries of what is known, of what should ideally be known, are protean, susceptible to fashion and revolutionary change.

Bound up with this is the plurality (or duality) of viewpoint and approach associated, in many social sciences, with the social structure by and in which the discipline impacts upon its environment. Often there is a decoupled feel about theoretical stances when viewed from the practitioner's desk. In management, for example, the theory of the firm (12) begs questions about credibility, as practitioners demonstrate a reluctance to accept that theory can or should migrate into practice. Managerial applications like operational research suffer even more from this problem of harnessability or credibility on these grounds and also on grounds of intelligibility. The theoretical approach to management, too, argues a rationalistic and essentially pro-active model, while many practitioners would argue that their professional experience (after all, their knowledge paradigm, built, they would argue, on the firm empirical foundation of experience) confirms them in the view that management is humanistic and essentially reactive. They would prove it by, *inter alia*, telling us how 90% of their time day by day is spent dealing with crises and hassles. They would even go so far as to attack knowledge on the grounds that "knowledge alone will not see you through" (13) and perhaps they would be right if what they meant by knowledge was merely theoretical knowledge. It is this scepticism of knowledge, as embodied institutionally in educational systems and the ostensibly vested interests of knowledge élites that impels Eva Etzioni-Halevy (14) to argue that in terms of social stability and economic stability Western culture has suffered deleterious effects from knowledge. In the areas of politics and social policy, an ingenious case might be made based on this view, even though we would be forced to acknowledge how Janus-faced many so-called practitioners are, based as they are in thought-worlds which draw

freely upon both theory and practice and knowledge in both spheres. (15)

It is interesting to consider particular subject disciplines as substantive structures in their own right. They have, after all, their own syntactic structures, in the ways in which experts express their ideas and devise acceptable and unambiguous ways to communicate to each other. They are also bodies of concept-commitments about the nature of the subject matter, (16) and such concept-commitments enable the initiated not merely to function productively but also to analyse the pattern and methodologies of their activity in a metacognitive way. This notion of reflecting the paradigms in substantive structures is very helpful when we come to examine how paradigms are handed on, offered, tested, rejected, in the course of education and training, say, for management, social work, or education. Looking at a field like librarianship in this way allows us to combine what we have stated about paradigms and about theory/practice and about substantive structures. It is a multi-disciplinary field, in theory and in practice, and it demonstrates multiple realities since both theoreticians and practitioners show multiple reality constructions both in their jobs and if they are asked to describe their jobs. (17, 18, 19) One view of the field is that it is indeed a plurality of other fields and not a field as such! Other views emphasise the empirical and functional character of knowledge, judging effectiveness in terms of task mastery. At one end of this view comes another, which trusts to notions of objectivity and quantification, and demonstrates belief in the validity of importing theory into practice. Another approach demonstrates an entirely different value-system and cognitive orientation, with an emphasis upon subjective knowledge and humanistic/intuitive applications, and a corresponding distrust of objectivity. Hybrids exist, and such hybridity is forced into being over conceptual and pragmatic cruces such as how profit-laden should the exchange relationship be between supplier and client be. This is such a crucial area because it juxtaposes forcibly subject skills usually considered distinct (e.g. social service and economics and cost accounting), and strikes most revealingly at traditional knowledge and belief paradigms because of its insistence that profitability and accountability can be synonymous.

However, it would be wrong to leave the Kuhnian paradigm up in the air, and to assume that hypothetico-deductive methods are watertight. For Popper (20) scientific theories can be given only provisional authority: as such universal statements, although they may be right, are disprovable. And so falsifiability is the object of scientific observation. At the same time, it is difficult, he argues, to carry out this manoeuvre with the subjective knowledge encapsulated in social sciences, if what we really wish to do is establish (or falsify) basic assertions. Turning this round, we can see that for Popper there is a continuous state of revolution, as knowledge grows and as what we know (and know we know) is continuously tested and reformulated. It may be that, if truth is found, it appears to be based on facts, but it might also be based on values

and beliefs, a notion characteristic of heuristics in the arts and humanities.

Notions of knowledge change like this encourage us to consider what is happening in terms of the concepts we use. For they are certainly changing, as a result of external influences as well as through conscious and sub-conscious changes induced within the subject (i.e. the thinker). In fact, knowledge paradigms may be said to be founded upon theories which have a psychological origin. Among these we may cite the balance theory with its view of perceptual matches and its cost-benefits between change and resistance to change; the congruity theory which emphasises how our attitudes affect what and how we learn; and the theory of cognitive dissonance (21) where feelings and values and opinions all form part of one's knowledge and where arguably people wish to resolve situations of dissonance. This last theory seems to have a direct bearing upon the Kuhnian model in that it encourages us to ask how scientists allow themselves to be affected by theories of which they do not approve, and what kinds of self-concept scientists evolve when accepted by or rejected by their peer group.

Knowledge paradigms as we have described them can be found in groups but of course they are important as individual characteristics too. The mental set of a learner should be as important to a teacher as their intellectual and problem-solving abilities. The ways in which we acquire information and structure it into knowledge has been interestingly described by writers like Rumelhart (22) and Schon (23). We might describe learning as a process of accretion and schema creation: schemata are arrangements of information in memory, active and interactive, knowledge how and knowledge that, able to generate new ones upon the old and of course jettison unnecessary and implausible ones. We find that some have to be adjusted and modified, others made broader or more specific. We develop coping strategies in the face of new knowledge, whether it is exciting or threatening. Error makes for change. Ideas may become clear to us as we work at them, or if some one uses analogy or metaphor to describe them to us. We build such schemata up and they become powerful ways with which we understand the world, communicate to other people, and change. There is a close association between personal paradigms and group ones, as Ziman and Polanyi (24,25) have argued in their books about personal/private and public knowledge, an interface which itself can often make for change or encourage no change: e.g. consider Marx and his radical view of social change, and a passive church-going Christian willingly accepting the theological dogmatism of the sect.

We can link this type of personal knowledge (it might be knowledge of our world, the world, ourselves, etc) with Popper's notion of falsifiability by considering how concept change takes place. Existing conceptions can be reorganised, or change can be triggered by a force from outside. Piaget spoke about assimilation and accommodation

when this occurs in children. For writers like Posner, Strike, and Hewson, (26,27,28) change occurs because the conceptualiser grows dissatisfied with a concept and is exposed to a new one. If he understands the new concept and finds it plausible, AND also feels motivated to incorporate the new concept into his current thinking, then concept change takes place. There are, of course, many models of this process, by psychologists as well as sociologists, but the appealing elegance of this view is that dissatisfaction is followed by discovery, and then an evaluative encounter ensues in which plausibility and what Posner calls "fruitfulness" are assessed. We might readily apply this process to many of the situations previously discussed. For example, a practitioner in management, faced with a need to introduce efficient business methods into a firm, is encouraged to explore microcomputer spreadsheets and, as a result, experiences both a radical change of external business practice AND a radical change in the way in which he conceptualises about business and himself qua manager.

The multi-paradigm aspect, too, can be harnessed to this process. First, we have theoreticians and practitioners (and all stages in between!), and second, we have multi-disciplinary influences. Notions of effectiveness, acceptability, suitability, viability, validity, and truth are consensually considered important, although they are defined and prioritised in different ways. Individual paradigms are crucially important, revealing themselves in the interactive and information-seeking behaviours of the participants, demonstrating themselves in overt situations where individuals show how open or closed they are to new information or to ostensive threats implicit when negotiation is required, and showing themselves in patterns of conformism or deviancy to group norms. More specifically, we can see the interface between individual and group paradigms in the very procedures and linguistics of research, in the ways in which individuals choose to write it up and disseminate it, in the methodological assumptions they use and expect others to sanction, and in the values and beliefs which adhere to the knowledge they have and share. Analysis of latent attitudinal agenda in published research can be most revealing: e.g. the extent to which the individual follows a fashion, decides to become adversarial, draws upon reason or emotion for his argument, and piggy-backs or derides group value-systems.

The paradox perhaps lies in the possibility that change is necessary to survive but solidarity is built upon similarities and parities, and such things suffer when knowledge kaleidoscopes are shaken. Recognition and affiliation sooth while controversy and alienation disturb. Yet we can see a process of creative entropy at work in knowledge processes, upsetting and debunking, restructuring and reformulating. Knowing such things are happening changes our view not just of our own knowledge, individual and corporate, but of ourselves.

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APPENDIX III

Knowledge representation and conceptualising
in management

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KNOWLEDGE REPRESENTATION AND CONCEPTUALISING IN MANAGEMENT

by Stuart Hannabuss, School of Librarianship & Information Studies, Robert Gordon's Institute of Technology.

It is possible to say that an expert in any field of knowledge can be expected to know particular things and techniques. This can be said of a stone mason, a physicist or a midwife. The expertise consists of a notional core of knowledge and skills (i.e. applied knowledge). Such expertise arguably can be found in other experts in the same field, although there will be idiosyncrasies of approach and valuation and quite probably divergencies in what is considered "right" and "wrong".

Such shared knowledge is shared for various reasons, arising from similar modes of training, fashions within a discipline, accepted norms within the sociological structures of the field. Such norms make themselves felt in such areas as what is accepted for publication in journals, the public recognition given to particular scholars, and the kinds of teaching and research which are supported by formal funding. More broadly, it may be correct to see such norms and expertise as embodiments within individuals of the "body of knowledge" at a particular time in history or in the state of an art. For instance, in the history of Western culture, knowledge of medical science or Biblical exegesis could be called such a body of knowledge, shared and extended and refuted by scholars in the field. Metaphysical assumptions may even exist, as when scholars thought that astronomy was a component part of a God-centred harmony of the world (1).

Apart from the philosophical issue of the extent to which articulated knowledge reflects the absolute character and identity of nature, there are some important features here which shed light upon the ways in which people think and represent knowledge. One of these ways is entrenched in traditions, which are examples of the historical momentum with which subjects grow and reformulate themselves and ratify discoveries as valid or not. Within such traditions, certain findings and experiments are regarded as important, certain principles and axioms establish themselves as central. Out of these models, solutions and valid further questions and theories arise. The methodologies utilised by such theories (e.g. the hypothetico-deductive methodology) are themselves validated by such traditions. The validation derives from the communality of experts and practitioners, and resides in and exemplifies that consensual knowledge about which Ziman speaks (2).

There are two strands therefore, that of the theory or subject knowl-

edge, and that of the conceptual and professional commitment of those who use the subject knowledge. Inherent in this are methodologies such as people use, assumptions they make, disagreements they try to accommodate or kindle, and the self-awareness with which they function within their chosen ambits. Writers on the sociology of knowledge and on the history of science and ideas acknowledge the knowledge-based problem-orientated axiom-laying character of these paradigms, which is what such systems are often called (3), and also stress how they operate within "constellations of beliefs and values" and in relation to techniques and applied methodologies devised by experts (4). Since beliefs and individual implementation and redesignation harness and rewrite such paradigms, they are relativistic in their nature once primary laws and axioms are accepted as of general utility and validity, although even these can undergo profound paradigm shifts, as occurred when the DNA molecule was elucidated (5). Looking at paradigms, therefore, provides a useful introductory way of putting knowledge representation in its full context: it implies both a Weltanschauung and a Zeitgeist, as well as the more focused phenomenon of an individual field of thought or research and of the self-conscious activity of practitioners within it. It suggests the notion of objective truth, of subjective truth and of consensual truth. From these derives the notion of received truth, that nomothetic or law-orientated or law-imposing dimension within any field of knowledge which vets what is asserted and suggested, an important point for education which institutionalises spheres of knowledge and gatekeeps initiatives so that norms, procedural and substantive, are preserved (6). It is important, too, since paradigms are founded on assumptions as well as generators of them, and so are considerable predeterminants of the very instruction and research which serves to identify and define them (7). These assumptions are in part conceptual (e.g. the idea of freedom might underlie a paradigm of education), in part methodological (e.g. the application of systems theory to the analysis of organisational behaviour in management, the use of logic and probability theory to the understanding of contemporary aspects of information retrieval), and in part based upon metaphysical elements like what the purpose of inquiry might happen to be and whether inquiry is animated by an urge to comprehend the origins of matter or the nature of Man. Such assumptions have value in that they are verifiable or falsifiable, i.e. they have an evidential status in their own right and accordingly affect the ways in which people think of knowledge and think of thinking about it. For instance, there are deep differences between the paradigms of mathematics and those of religion (8).

Nevertheless, it would be wrong to generalise from what has been

said so far and conclude that paradigms appear and behave in identical ways in all subject fields and social frameworks. Looking first at subject fields, one might argue that the normative assumptions behind scientific explanations might not carry over easily or plausibly into the social sciences, where management may be placed. Nagel (9) describes the deductive, probabilistic and teleological bases of scientific explanation, about its reliance on general laws with logical and epistemic roles to play within their field. Credence is given to these bases and roles when experts theorise and experiment since there is loyalty to particular traditions and agreed ways of assigning language to facts. Theories have what might be termed "a cognitive status". The scientific paradigm, therefore, is characterised by exemplars or puzzle-solutions which help experts solve problems, by a matrix of beliefs shared by a community, and by assumptions about methodology, in particular that employing hypotheses and rationality. Implied in the belief in paradigms, too, is a paradigmatic view of the evolution of a subject, following Kuhn's famous concept of "revolutions" or shifts (such as that upon the introduction of Newtonian mechanics and that consequent upon the acceptance of relativity), and implying a homogeneity among a community about key ideas and techniques such as that involved in the use of the periodic tables or the laws of thermodynamics.

Transferring such modes of thought and inquiry across to the social sciences (and *a fortiori* to the sociology of knowledge itself). Harvey has argued (10) that paradigms do not begin to get to grips with the processual and non-mechanistic character of a subject like sociology, and that there is not at any time in sociology a dominant paradigm. In a broader sense, of course, the community of people at work in the field "sociology" share a common conceptual framework, and for this reason Ritzer (11) calls sociology a multiple paradigm science. On the other hand, an anti-positivist case can be built up for sociology around the notion that "laws", in the sense of scientific laws, are irrelevant when man and his behaviour and motivation are interpreted with reference to experiential and value-laden criteria (12). The "objective facticity" (13) of the scientist is not shared by the sociologist. The fullest discussion of the many, competing conceptual frameworks operating in sociology is that by Burrell and Morgan (14), in which the assumptions on which an interpretation of social theory may be based (e.g. a positivist epistemology) and in which various perspectives (e.g. functionalist, where society is seen in terms of regulation and consensus; or radical humanist, where the cognitive wedge between man and society leads to alienation and justifies radical action) are debated.

The scientific approach suggested that, historically, it was valuable

to see science as something growing incrementally over time. Such a developmentalistic view can actively get in the way of a subject like politics, which is non-cumulative (15), non-normative, and less concerned with theoretical frameworks than with empirical outcomes. Many commentators in a field like education, are concerned with the interpretative barriers which traditional modes of thinking impose upon debate, barriers which express themselves in broad conceptual frameworks (such as that deriving from capitalistic liberal democracies, (16)) and specific concepts like "authority" and "freedom".

It is a truism to state that knowledge makes itself manifest in many social structures. Gurvitch (17) talks about types of knowledge from personal to corporate, from symbolic to concrete, from partisan to philosophical, and suggests that knowledge is used in many ways by microsociologies - e.g. those like churches, states and trade unions. Us/them dichotomies and collective attitudes, as well as the very conception of knowledge itself in the community, affect the knowledge and how it is used. There are many elusive elements to such knowledge, such as that represented by an individual's conception of egocentric space. Some knowledge is very complex, like that associated with nationalism or ecological responsibility or successful managerial practice. Some of the particular ways in which teachers and students use knowledge of and in management will be discussed in later sections.

If one needs to set knowledge representation in social frameworks, such frameworks need to be comprehensive and not partial. For instance, considering the sociology of knowledge, it would be partial to treat merely the "knowing" (i.e. philosophical, epistemological, ontological) elements of the subject without dealing with the social and economic setting within which it has evolved. An example of this might be to consider information overload as a result of the introduction of new technology without looking at the infrastructure of the company within which such technology was introduced. Such holistic approaches to conceptual frameworks is necessary for the social sciences (18), partly because development of such knowledge relies not on a mechanistic teleology but on enabling cross-currents of many kinds, social, cultural, and economic. Another element in this comprehensiveness concerns the language which may be used to express the concepts: unlike the controlled nomenclature and taxonomies of fields like organic chemistry, those used in fields like comparative politics are fluid, not subject to consensus, susceptible to neologistic usage and *ad hoc* coinage, a natural language predisposed to break out of current moulds to express and reflect new concepts and new impressions. There is, then, a conceptual and linguistic invariance in such fields as politics, and such char-

acteristics are arguably more protean still in fields like history, where metaphors and synonyms abound, generalisation is hazardous, and interpretation is hamstrung by the remoteness of the past (19).

A truly comprehensive portrait of the knowledge and social framework relationship would look at the social bases for what was written and thought, at ideological superstructures and the correspondences between material conditions and ideas and language, and at how people categorise reality. Such treatment can be pursued in the work of Mer-ton, Talcott Parsons, and Mannheim (20). It may also be enhanced by considering the ways in which knowledge is communicated by people working in the same field, and the extent to which such communication reflects (and indeed determines) the structure of knowledge in that field (21). Bibliometric studies (22, 23, 24, 25, 26) reveal that knowledge is structured within any subject discipline, has its particular characteristics in terms of obsolescence, is mediated and originated in particular ways, and is cited in sociologically important ways by those at work in the field.

Theory and practice as influences on knowledge.

An important ingredient in a paradigm or conceptual framework is a constellation of beliefs or values held by the experts or practitioners. These are significant since they not only influence what is considered true and valuable but they also affect the view on how the subject field should develop and be applied to real-life situations.

There is a subjective and even a polemic dimension, then, to conceptual frameworks, deriving from the way in which people feel they should be used. For this reason, it seems logical to call such frameworks "ideologies", systematic bodies of concepts which have the effect of determining how people think of a subject or activity and of influencing the criteria by which they judge their own thinking. In this way there is a close association between these bodies of concepts, the methodologies people choose to use, and the broader sociological and communal characteristics of the group. This approach has a further advantage in that it allows one to incorporate another important element: that of the type of knowledge system under scrutiny, and whether it is action-orientated or knowledge-orientated or hybrid.

Many social science subjects are regarded as intransigent when it comes to the superimposition or eliciting of paradigms because they are not stable, or are in a "pre-paradigm" state. This has been said of politics (27) where logically sound positions may be developed with only tenuous reference to what are regarded as central paradigms, and may be argued without reference to consensually held methods of verifica-

tion. It might be that maturity is an important attribute of a paradigm-orientated subject, in so far as there actually is a (set of) systematic conceptual framework(s) rather than a multiplicity of specialised vocabularies. The field of information science typifies this model, in that several frameworks co-exist and vocabulary and repertoire and axiological differences abound between them: e.g. the computer science/algorithm framework with its emphasis on technology and programming languages and data handling, contrasted with an information structure framework with its emphasis on search strategies and linguistics and cognitive psychology. Coupled with this process of change or maturity is the external social frame within which such subjects evolve (28). The methodological dimension is crucial here, too, and may be seen reflected in various styles or ideologies at work, such as the application of linguistics in artificial intelligence and the impact of the information-processing model on cognitive psychology.

The polemic attribute of "ideology" (as opposed to conceptual framework) is useful also because it reflects upon attitudes to what is true. Knowing - or believing - what is true is founded not only on what is known or believed but also on what is rejected as untrue and on the need at times to hold more than one explanation of events and phenomena. Such tolerance of ambiguity is an important element in social science thinking. For instance, considering what motivates a member of an organisation to commit an act, a thorough-goingly purposive explanation may not suffice. Hidden agenda and ostensibly incompatible influences might affect the act. There may be a logical, rational explanation for what happened yet at the same time a truer contingent explanation. Two or more different explanations may be equally satisfying, and the use of logic (29) may not allow one to penetrate to the heart of the mystery. Deduction and hypothesis may also be inadequate ways of understanding events like trade union activities, the ergonomic suitability of an office environment, or the reason why induction training seems to work one year and not the next.

For these reasons it seems appropriate to call the field of management a conceptual arena. It is this for two reasons (30): first, it is a field which lacks "a core of consensually validated knowledge or commonly accepted body of truth about the nature of management"; and second, it is a field which demonstrates an *uncoupling* of practice from theoretical ideas. As a result of these, conceptual frameworks are pluralistic, subjective some might say, and are competing explanations of management phenomena (31). It could be said that such divergence derives in part from different training and educational traditions (e.g. Taylorian and Mayo traditions, quantitative and qualitative/experiential traditions),

partly from the differing perspectives of theory and practice, and partly on the heterogeneity of the language with which management concepts are instantiated.

Since frameworks are pluralistic in management, and since most knowledge is valued in terms of its operational utility, one finds a persistent contamination of the pure model of monopolistic paradigms discussed earlier. Factors like intentionality and expectations and confrontation and roles criss-cross objective knowledge since such knowledge is primarily empirical, despite its theoretical base (32). Value may be attributed to knowledge in relation to its use - e.g. knowledge of industrial relations or social psychology. One could call this a network of subjective meanings held by a communality of practitioners. They are trying to make sense of their environment, their own actions and the actions of others. Meaning is attributed to actions, and concepts, which enable them to do this effectively. Perhaps it is because of the implausibility of establishing laws of human behaviour that one needs to ground the concept in the phenomenon in this way. Searle argues that "the concept that names the phenomenon is itself a constituent of the phenomenon", and cites "marriage" as an example ("you know and think what you are doing when it occurs") (33). To this extent, then, paradigms in management, if they exist, are self-formulating. Philosophically, one could adduce "money" as largely what dealers in it choose to make of it (34), a proposition which has interesting reverberations into phenomenology and the phenomenological approach to sense data (35).

Another element about management knowledge which is relevant is that distinction between procedural and substantive knowledge. Procedural knowledge (or control knowledge) may be said to be what needs to be known in order to implement or operationalise a process (a training interview, a production output, action in exception management), while substantive knowledge consists of knowledge of the process itself (of statistics for quality control, of accounting and budgeting so as to prepare a cash flow chart or profit and loss account, of smelting processes in a foundry). Such a model, of course, is simplified since one interpenetrates with the other and both are compounded by intuitive and decisional and metacognitive factors. The model has to be propositional in character, protean and empirical. The knowledge has to be more than propositional: it has to be formulated procedurally (36).

The pluralistic processual and protean character of conceptual frameworks in management, and by that token, in library management, has to be borne in mind continuously when looking at knowledge representation in those fields. Bibliographical analysis and content analysis,

both familiar techniques in areas like the social sciences, allow one to explore the extent to which these points are borne out in the literature. Management is a very role-conscious activity, particularly in the sense that managers keenly attend to the qualities a manager should distinctively possess (such as technical involvement and adaptability) and what beliefs about management they should entertain (e.g. self-concept as lubricant, communicator, monitor, leader) (37). It is regarded as a process, a reactive and instinctive activity, fragmented and episodic, set in a network of reciprocal relationships (38). It is very self-referential and formulates its own conceptual frameworks in step with active participation in management, setting goals for others and for self (39) and regarding learning as achieved incrementally and situation-specifically on the job (40). There is an awareness of day-to-day reality and what are called secondary constructs, those assumptions made behind overt decision-making and problem-solving (some of these assumptions about one's self and one's perceptions of one's job), and, pushing this further, one can see ideals and archetypal concepts (such as the concept of the responsible manager and the ideal of the effective firm) emerging (41, 42). These will be developed below, for they indicate that conceptual frameworks, and not just those deriving from theory, do appear in management and are of importance in understanding how knowledge is represented and operationalised or exteriorised in action.

Management is a process where, paradoxically, it is fragmented by the need to react to crisis and contingency and yet needs at the same time to articulate some overall conceptual scheme. Such schemes may consist of taxonomies of motivational characteristics for personnel, the framing of aims and objectives for the firm, process representations like organisation charts and production schedules and critical path analysis, or management information system installations with integrated planning, budgeting and marketing policy. These are necessary so that functional and departmental and individual perceptions operate consistently with corporate goals or simply with the demands of external reality. At the functional level, knowledge is built up and demonstrated empirically, for instance through project management or profit and loss (43). The conception of *management as learning* (44) has led to another important dimension to this - that of management training, where practising managers clearly feel that there is a body of knowledge (technical or substantive, procedural, as well as attitudinal) which can and should be inculcated into initiates. The emphasis on heuristic and survival learning in such training is a good example of the valuation managers give to knowledge and the type of knowledge they feel they themselves need

in order to be effective (e.g. interactive skills, judgement, responsibility, leadership) (44, 45, 46, 47, 48, 49, 50, 51).

Of particular interest to conceptualising in management is the fact that management structures in themselves have no certain control over what they manage. Concepts like exception management and fire-fighting and trouble-shooting exemplify this uncertainty, and many would regard management as a process truly at home in an environment of risk. Human activity entails coalitions and competing interest groups in such a situation (52), and consequently there is a break or decoupling between abstract/formalistic knowledge and practice. Also, since it expresses itself through action and application, it can be argued that 'the sources of conceptual change are to be found not in the rational structure of thought but in thought itself ... awareness of practice makes one aware of the inadequacy of the concepts themselves ... and even that concepts cannot adequately reflect practice itself ... one may call an organisation a rational structure but it also is an empirically adequate means to a given end and a way of bringing about certain states of affairs in the world with participants who have their own empirical perceptions of their own actions ... (53)

So "knowledge alone will not see you through" (54). Even the prior learning brought by managers to any learning experience seems to need this thread of practicality: for instance, intelligence is a start, but needs to be successfully applied to decision-making, handling stress and uncertainty, and discriminating when information is ambiguous (55). Prior learning can consist of misconceptions, too: such as placing undue trust in technological mastery for industrial health or expecting people to accept innovation readily (56).

One is led to reflect upon the kinds of thinking that are required in such situations. Bruner's distinction (57) between intuitive thinking (based on implicit perceptions of the total problem although not necessarily aware of the process by which answers are obtained) and analytical thinking (which involves step-by-step formulation and considerable awareness of the information used) is helpful, particularly when processes like problem-solving are considered. Often these require *both* types of thinking for managers ideally should be able to use thought for both manipulative and dialectical purposes. It may be useful at this point briefly to step back and remind ourselves of the types of knowledge that exist. One kind of knowledge is practical *knowledge how*, another *knowledge of* (as in the French verb *connaître*), and a third *knowledge that*. (58) The third is often called propositional knowledge. Knowledge of can be broken down into knowledge how (e.g. "I know French" means

"I know how to speak French"), and also by grammatical transformations into knowledge that too (e.g. "I know of the Battle of Hastings" means "I know that the Battle of Hastings occurred in 1066"). Looking epistemologically at these types of knowledge allows one to differentiate two traditions, linked with Bruner's intuitive and analytical thought, those of empiricism and the kind of rationalism precisely called apriorism. Empiricism sees experience as the basis for all concepts and claims that experience justifies knowledge, whereas apriorism seeks to decouple knowledge from experience, arguing that there is knowledge which does not depend for its justification upon experience and that the mind contains concepts and ideas not derived from experience. The formal concepts used in logic, and the metaphysical categories outlined by writers like Kant, demonstrate the emphasis on reasoning in apriorism. Of course, these are not mutually exclusive positions, and this is particularly evident in management where one comes to learn through doing and then frequently conceptualises systematically in retrospect, and draw on theoretical conceptual frameworks and break them down and builds them up in practical situations, and apply analytical deductive techniques like operational research but adapt them to intuitively and inductively perceived problems.

One reason why this mixed approach is often taken by managers is due to the relationships between (a) external reality and the concepts and principles used by managers when they think about their trade; and (b) the self-referentiality of any such practitioner community, as a result of which knowledge is related to that ideologically-slanted conceptual framework mentioned above, and personalised so that knowledge is intimately bedded down with the repertoire of skills and attitudes the individual manager possesses. A simple way of representing this is to say that some fields are action-orientated, some are knowledge-orientated, and some are mixed. Examples of the first are farming and management, of the second mathematics and theology, and of the third education. Looking hard at management, however, leads one to move it into the mixed category: for there is a continuous oscillation between action and knowledge in this subject, between practice and theory. This symbiotic relationship probably exists in many vocationally-orientated social science subjects, and here the relationship will be examined as a way of assessing the extent to which paradigms and conceptual frameworks can validly be applied and attributed to the field of management. Two aspects of management will be considered, management as such, and information management.

Looking at managers and what they perceive their jobs to be (59), it is possible to see them as reasoning beings getting work done through

people and testing assumptions and exploiting opportunities. At the same time, it is possible to infer (and to notice that the managers themselves infer) recurring patterns or schemes in their actions and thoughts: e.g. they see their jobs partly in terms of what the job description says, partly in terms of the need to prioritise and adapt to change, and partly in terms of particular aspects of organisation behaviour (such as satisfying customers or maintaining quality). It is perhaps easier still for management theorists to do this, as MacLagan (60) says in his study of the way in which managers conceptualise "responsibility" and see their role along a positive/negative range in relation to it, and as Etliche and O'Keefe (61) explore by statistical means in their correlation study of attitudes to innovation (in terms of factors like creativity and age, readiness to change and organisation size). More informally, recurring characteristics (of achievement, interaction with environment, and kinds of knowledge use and valuation) can be inferred from a cadre of successful companies (62), and from the literature of management (e.g. Fayol, Barnard, Drucker, Mintzberg, Kotter) (63). Taxonomies of organisations and organisational behaviour can pick out and structure levels of control, management styles, technological investment, task structures (64), from which it is possible to infer likely settings within which conceptual frameworks evolve or, predictively, might evolve (65). Organisations may be seen in paradigmatic terms in their own right, as when Georgiou (66) argues that the goal paradigm traditionally associated with firms might be evaluated in terms of counter paradigms like Barnard's incentive paradigm. He also suggests that the goal-orientated paradigm is too restrictive in that it remains closed to the many influences from the firm's environment.

Such an argument as this reminds us of the action/knowledge duality. This is one of the most criticised areas in management, demonstrating a profound scepticism among practitioners for theorists, and a gulf of incommunication between some of them. For instance, it is one thing to say that management comprises the setting up of formal structures so that rational control and co-ordination can operate in the interests of maximising profits for shareholders (a classic management definition); and quite another, once we have interpolated the processual and pluralistic factors discussed in this section, to maintain that puristic stance. Such a position is not even *eristic*, let alone epistemic.

Nevertheless, as we have seen, the interconnectedness between theory and practice is very much there as a real force in the way in which people think about management and managers think about their own activities. There are taxonomic and categorial modes of thinking in management which tend to breed the paradigmatic approach. What is a

manager? an entrepreneur, a specialist, an administrator, a diplomat? to what extent is the policy of the company associated with which type? (67). More broadly, one might ask about how normative, conservative, partisan, any particular theory of management is (68), and, more broadly still, into what world view or philosophical or cultural setting one might care to place any particular management approach. Such applications might consider pragmatism as an explanation for managerial effectiveness, or universalism as one which explains how everyone can apply universal principles to manage effectively, or functionalism which gives emphasis to the satisfaction of needs (69). A paradigm may even be inferred from the interface between academics and practitioners (70). At its most comprehensive level, such a search for an ordered or orderable structure within which effective thinking and acting can occur will lead to world views as wide as those suggested by S.C. Pepper in his **World hypotheses: a study in evidence** (Univ California Press, 1942) which include such schemes as mechanism (by which phenomena can be explained by interactions between discrete parts), contextualism (in which perceptions of reality depend on their context, and so truth is intuited from it), and organicism (by which apparent fragmentation and contradictions are resolved on successively higher levels of integration) (71). This becomes highly generalised, and more specific applications like Loasby's (72) seem ultimately more helpful, since he argues that profit-maximisation may be seen as an over-arching economic paradigm at a particular period of history (e.g. in Marshall's view of the theory of value), that that influenced economic interpretation and strategy for subsequent years, and now with the new theory of the firm is suffering paradigm shift. Behind all these mixtures appear settings for thought, affecting and affected by knowledge, practical and theoretical, converting ideas into the type of action which itself generates further ideas and an awareness that one is learning through doing. The process is pluralistic, which is another way of saying that the phenomenological and subjective status of knowledge is regarded as supremely important. Yet such knowledge is acquired within a practical context which demonstrates archetypal and recurring features and which draws avidly, despite ostensible suspicions, on theoretical structures, codifications and classifications. Management, then, to be effective at the highest level, blends practical action and the most relevant and perceptive thinking (as it appears to practitioners), and thus exemplifies an organicistic system in Pepper's terminology. Such a system subsumes one that is merely contextualistic (which acknowledges the multi-paradigmacy of the participants) and one that is merely mechanistic (which interprets the essential reality of the system in terms of causation and ends-means

models of the kind with which simple Taylorian conceptions of management were concerned).

Information management, too, demonstrates numerous interesting features as a field of activity and study. Like management, its origins are multiple, and its historical evolution is hybrid. It draws on theory and is developed as much in practice. Its applications are many and conceptions of it as a distinct field of endeavour are protean and adaptively obsolescent. There is a tension between action- and knowledge-orientated approaches in such areas as (a) database development and analysis of information retrieval characteristics in terms of probability; (b) practical information management in the workplace and the technological and mathematical theory which underwrites it; and (c) practical search procedures by users and the linguistic/semantic and cost accounting parameters within which such searches take place. In part, the tension is a by-product of the knowledge limitations of the users, and therefore demonstrates the familiar phenomenon of a system inducing stress as a result of adventuring across traditional knowledge boundaries. Furthermore, information management may be conceived with reference to parallel and virtually co-extensive areas of knowledge, such as "communication", which is hospitable enough to cover key elements of information management such as the concept of the transaction, that of information content and "noise", that of feedback, and those of recall and redundancy. Paradigms from communication and media studies can easily be imported into information management as if to elucidate its very nature, such as Gerbner's view that communication has two dimensions, perceptual (i.e. how we see things and how these get filtered by our experience and communicated to others) and control (i.e. how we do the actual communicating) (73). The many models of impact on the receiver and of communication networks exist (74). Such invasions or adaptations can be seen also from other fields, like the mathematical aspect of communication represented by Shannon's model of transmission and reception (75), cybernetics and thermodynamics (76). In common with management itself, information management emphasises the need to know the full social context (77) and the metacognitive dimension so closely bound up with self-referentiality (78). To sum up, it is pluralistic as a result of combining many disciplines and many disparate traditions and backgrounds; lacking consensual knowledge in terms of an over-arching paradigm, it exhibits the characteristics of an adaptive system, an arena of competing viewpoints; it is protean in the sense that, as a volatile area vulnerable to contemporary change, it is susceptible to historiographic and absolute shifts of perspective, realignments of what practitioners consider important; and it is an area

peculiarly sensitive to its own nature, that of communication and retrieval, and in consequence aware of the sociological features of knowledge, not least how having knowledge changes knowledge itself.

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APPENDIX IV

Analects about 'effectiveness'

ANALYSES ABOUT 'EFFECTIVENESS'

(1) 'Effectiveness indicators relate output to use. They represent the performance of a service from the user's perspective and can be used to see how well the community is being served, and to identify areas of poor performance'. [Included here are user satisfaction and the amount of library use by satisfaction levels.]

Office of Arts and Libraries : Costing and performance assessment in public libraries : a briefing paper. HMSO., 1990.

(2) 'Effectiveness : how far the output achieves government objectives. Quality of service can often be measured and is regarded as being an indicator of effectiveness'.

Jackson, P & Palmer, A (1988) 'Public sector efficiency : some central issues', pages 25-33 of Beeton, D ed. Performance measurement : getting the concepts right. Public Finance Foundation, Discussion Paper 18.

(3) 'Effectiveness has been defined in many ways, including goal attainment, success in acquiring needed resources, satisfaction of key constituent groups' preferences, and internal health of the organization ... This [work] defines an effective library as one that achieves its goals. However, it must be acknowledged that academic and research libraries have many constituencies, often with conflicting needs and demands, which make it difficult for the library to develop a unified, prioritized set of goals. The emphasis here is on the quantity and quality of services provided to the library's major user groups'.

Van House, N A & others (1990) Measuring academic library performance. American Library Association.

(4) 'A measure of effectiveness is a number designated to indicate the operational state of some part of the [library] service. It is not usually obtained directly or simply from data. Most useful measures are obtained by processing the data by means of a mathematical model chosen to represent some part of the operation'.

Morse, P M (1972) 'Measures of library effectiveness', Library Quarterly 42(1) 15-30.

(5) 'To talk meaningfully about effectiveness we need to have a clear understanding of the baselines against which achievement can be measured. Effectiveness cannot be considered in isolation from predetermined goals or pre-set performance targets. As such it is quite different from efficiency ... which is an inward-looking measure, whereas effectiveness, at least as far as libraries are concerned, is an outward-looking measure. Wessel and Chrissen got close to the distinction when they said : "Operations are efficient, services are effective". Efficiency is a feature of a service which can be achieved without taking into account the organization's overall aims or intentions ...'.

Cronin, B (1982) 'Taking the measure of service', Aslib Proceedings 34(6/7) June/July 273-94.

(6) 'Questions on effectiveness ("are we doing the right thing?") and efficiency ("are we doing the thing right?") need to be asked persistently and systematically by library managers. It has frequently been seen as a cyclical

model - the provision of information being provisionally framed, then questions asked about anticipated benefits and whether they can be costed in relation to administrative efficiency, and then questions posed about how they can best be controlled and how they can assist managers to evaluate performance. This becomes in its turn the basis for the re-formulation of policy. Whatever criteria for effectiveness and efficiency are devised, they must be translated into operational and evaluative terms ...'.

Hannabuss, S (1983) 'Measuring the value and marketing the service : an approach to library benefit', Aslib Proceedings 35(10) October 418-27.

APPENDIX V

The concept of performance : a semantic review

Source : Aslib Proceedings 39(5) May 1987 149-58

The concept of performance: a semantic review

Stuart Hannabuss

School of Librarianship & Information Studies,
Robert Gordon's Institute of Technology,

The concept of performance is pluralistic and demonstrates the ability to migrate from one linguistic and semantic register to another, e.g. from profit to non-profit contexts. Usage changes denotational and connotational aspects of the concept as people, lay and information professionals, use distinct frames of meaning and employ the concept in abstract, anecdotal and other forms. Performance is a central criterion in the effectiveness of the supplier/user exchange relationship, and this criterial role implies the existence of a deep agenda in both the semantics of the concept and its use. The fact that the concept is also mobile is suggested with reference to new quantitative dimensions attributed to it by literature and practice.

The concept of performance is complex. This is because it is a pluralistic concept, consisting of several levels of interpretation, from the literal meaning of 'the doing of something' or 'an activity' to more complex meanings. Among these might be included the notion of dramatic performance, a set of actions displayed by an individual for effect, or the execution of such actions with a degree of efficiency and success.

Many meanings of performance

The plurality of the concept derives also from its use in many different contexts^{1,2,3,4,5,6}. In some, performance might be a term of praise, coupled with adjectives like good or enjoyable. In others, it might be pejorative, implying unnecessary fuss and bravura. Practitioners in different settings tend to use the concept in various ways. There is the manager who might emphasise performance as a way towards profitability for his company or a personnel supervisor who looks to her staff for certain levels of output and efficiency. A scholar might consider performance in another sense, to suggest the extent to which an argument holds true and valid, or a document manages to deliver the goods. Here we have rather specialised applications of the concept of performance, in which it becomes leavened with (or even co-extensive with) other concepts like truth, integrity and even availability.

It is possible to envisage 'performance' as a designation for something which is good, cheap and fast. Qualities such as these typify what many people want of products they buy or activities they carry out. Of course, concepts like good, cheap and fast are protean, changing according to

point of view or situation, so that cheap might in fact be reasonable or economical, not cheap and nasty and fast is but not at the expense of what is good. Built into the concept of performance, then, are other concepts which people attribute to it and which they need in order to help them define and personalise it for themselves.

Nevertheless, most practitioners move in an environment of specialised vocabulary, and work at activities with their own lexicons and registers. For this reason, concepts like good and cheap are re-designated in the argot of the work-place and become words like 'utility' and 'cost-benefit' and 'cost-effectiveness'. In this way, concepts become usable and acceptable in their particular settings, although the speakers usually revert to commoner words in domestic and personal situations. There is a kind of bilingualism at work.

Many of these concepts are used in context, not just of work but also of other concepts and within a matrix of spoken speech. Not only are there the usual denotations and connotations suggested by this, but also it's common to find that concepts support each other, and in fact help to define and delimit each other. Writers often, when they introduce a concept like 'performance' to a readership which they believe will find some semantic difficulty with it, define it and offer a range of alternatives and synonyms for the reader's attention. For instance, we read '... there seems to be little agreement about the basic terminology, so that we are left without generally evaluated and accepted definitions of such concepts as performance measures, effectiveness criterion, value, satisfaction, benefit and impact'⁷. Readers may find it even more useful to see such concepts demonstrated in working language contexts, where any obscurity or contentiousness associated with individual definition can be smoothed. We find authors defining concepts then suggesting how the words which represent them may actually be used. 'Putting the four words in one sentence may help to explain how they differ: the results of measurement can be used to evaluate the performance of a library and thereby determine whether or not it is effective'⁸. In this way the author seeks to make clear what the words 'measurement', 'performance', 'evaluation', and 'effective' signify.

Performance, profit and productivity

Concepts like performance, are not only pluralistic in their meanings and diverse in their usage, but they also exhibit mobility. They share this faculty with many others, of course, although the multi-disciplinary character of the concept of performance (compare other such concepts like system and communication) encourages us to suggest that this mobility is greater than usual. This mobility is made all the greater because the concept of performance is used in specialised *and* ordinary linguistic settings. When concepts exhibit mobility, they show an ability to migrate. Performance shows this ability, if we consider one major meaning of performance, which entails doing something in a particular way with a

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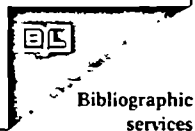
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particular end in view. The lexicographic profile of the word shows a strong association with the notion of activity undertaken with profit in view. So we encounter the concept in many management textbooks. Classically, Peter Drucker uses the concept of performance in this way. For instance, in his collection of essays called *People and performance*, he says 'in business enterprise economic performance is the rationale and purpose'⁹. He equates results and performance and suggests that, along with other factors like work and decisions, performance of that type characterises the organisation. Similarly, we find in other writers the equation of performance to productivity or profitability, to yield over an accounting period¹⁰ or to the attainment of economy of operation in the management process¹¹.

Such interpretations and usages are not, of course, the only ones or the major ones. They concern us here since we are looking at the concept of performance from a management perspective. With this in mind we realise the heavy bias of practitioner lexical and belief systems on word usage, and here we see the almost inevitable attribution of profit and productivity to the concept of performance. However, it is possible to see the concept of performance in non-profit settings, particularly when applied to organisations like hospitals. There the 'good' derived from effective performance argues the presence of concepts such as public benefit and service, even though the notion of performance is not deformed beyond recognition: it remains highly active in the area of accountability and cost-effectiveness, which all tax-payers arguably want public services to demonstrate, and in recent years in the UK we may push this further by suggesting that the concept of performance has begun to take on profit overtones, because of managerial practices and attitudes in health services.

Users are often keenly aware of such changes in meaning and usage, of the mobility and migratory nature of concepts like this. Writers refer to key documents as if, like citational trees, there the new meaning started and things have been subtly different since then. We find statements which confirm this view in many places, such as '... performance measures were a landmark because they brought research to bear for the first time upon the problem of measuring the effectiveness of public library services'¹². There is an explicit reference in the text to the source, in fact the *locus classicus*, which forms the subject of the remark. Writers are also historiographers and lexicographers of their art, generally by implication since most of them do not set out to write mainly about language or the language they use. Bommer and his collaborators¹³, for example, seek to move from what he calls traditional approaches, to library performance measures, to modern ones by recommending that '... in order to provide library users with access to a published information base that is growing at a continuous and awesome rate, it is vital that decisions and plans be made which allocate the library's available resources in the most efficient and effective manner ... the need for objective criteria for allocating available resources ...', an argument which takes us back to performance

measures and, more important, what Bommer *et al* want us to mean by them.

Usage defines meaning

We often find, therefore, that words mean things but that their users want them changed. This is because the activities, attitudes and value systems which the concepts represent and symbolise are being changed in themselves, and language and thinking keeps pace with events. So far we have seen that writers and practitioners, when faced with a pluralistic concept like performance, do things to it and are well aware of the need to subordinate words and concepts to the imperatives of communication and use.

Another interesting feature of concept use and definition, which also reveals this practitioner bias, is seen in the way in which people in information work, who in many cases accept the use or utility of concepts like performance, define it and use it in terms of what they regard as its component parts, just as if a factory job could be built up from lots of different actions. This process, in semantic terms, often demonstrates the anecdotal origins of many practitioners' thinking processes, as they reflect upon their own experiences and perhaps even recall them in quasi-visual terms. So we might find this in writers who seek to define performance in particular library situations. In reference work, for example, one writer¹⁴ offers up as evidence for being a 'good' reference librarian such component skills as 'the ability to organize data and information for people to use', and develops this argument in the same style. Important traits of such good reference librarians are listed (listing in itself being a revealing deictic strategy in discourse) as 'imagination, perseverance, judgement, accuracy, thoroughness and orderliness . . .'. Perhaps handling concepts is influenced among such writers by the urge to be completely clear for their readers, or even from conditioning built into their own jobs, perhaps derived from the orderly arrangement of information and documents, or from work putting together jobs as job descriptions/specifications. In whatever way, the perception and concept of 'performance' are affected by such factors.

The component factors discussed here were all rather concrete: they could be shown by people on the job and no unusual skill with words is needed to use the concepts accurately. The component factors of performance can be expressed in a more abstract manner, even though the procedures, implicit in how they are expressed, remain rather simple. For instance, it is easy to express performance in terms of other concepts like efficiency and effectiveness, which many writers do. They may be generalised from concepts, applicable to all and any library or management situation, and imply no heavy leavening of profit or non-profit, unless the user chooses to give them one. Yet, in fact, they exist at one remove from the concrete terminology which practitioners would use to define and

describe their actual jobs, and this is what makes them more abstract. Also, a number of practitioners would not customarily use such abstract terms, preferring more concrete ones, or even distrusting the associations (the perceived semantic pedigree) of concepts, which they felt were migrating from other areas of experience or other disciplines (e.g. sociology, psychology, management, economics, cybernetics, etc). It might reveal both a conservative instinct among certain professional groups with their linguistic and conceptual codes and mores *and* a disinclination to speak in abstract terms about what is better defined concretely¹⁵.

Yet we need to probe the beast even more fully to reach the heart of the matter. The concepts people use, the revelations about conceptions they hold about those concepts, are interesting cognitive barometers. In examining the ways in which library and information managers, both practitioners and academics, talk about performance and its associated concepts, we see under the verbiage that some essential relationships or nexus strands emerge. One of these rests in the proposition that performance is the degree to which the system contributes to user needs. This sentiment emerges frequently in both talk and literature – ‘the interaction between users . . . and the providers (library and academic staff) is likely to be effective in highlighting any problems’¹⁶ ‘. . . it can be regarded as the bringing together of a patron need and the information stored in one or more books or documents’¹⁷. This view of performance is customary, too, when people speak about performance of information retrieval systems, where they stress how performance is built up around relevance, precision and recall.

Deep agenda of concept networks

If it is possible to assume that at the heart of the concept performance lies the notion of a provider serving a user, this is of value to us in two ways: as a sign of what experts regard as central to their mystery; as an important token of how deep agenda operate to influence and manipulate the surface levels of language and expression. The suggestion is that the concept performance is most revealingly discussed and used when we envisage it as having such a deep agenda, rather like sentences having a Chomskyan deep structure, and in this case an important part of that deep agenda rests on the notion of provider serving user. It could alternatively, be expressed as an exchange relationship, the exchange resting partly on the actual supply of information from one to the other, and partly on the response and non-response and perceived benefit which the one sees in the other (*ergo* which the other supplies to the one).

This view of deep agenda could also be seen as implicit ways in which people think about themselves in particular professional spheres, as well, of course, as the intellectual associations and belief-systems which such people draw upon. Bommer¹⁸ demonstrates this facility when he speaks about performance as an essentially user-orientated concept, and backs

up his case by speaking about concepts normally (within the professional parameters and expectations of this field) associated with it, like utilisation, availability, completeness, relevance and cost. These demonstrate the central assumption that, whatever else we care to make performance into, it is essentially that, the degree to which the system contributes to user needs. Even modifications of this central notion accept its basic validity: when Naylor¹⁹ talks about 'impact', he is in fact suggesting that the concept performance can be equated with the concept of impact, for unless performance is visualised as impact upon users, with user benefit in mind, the very notion of performance itself becomes distorted or impoverished.

This notion of impoverishment is of interest in itself. In many fields, disputes between skilled users of professional argot arise on possible or needed or undesirable changes to the meanings of words, and are often symptomatic of debates about the phenomena and attitudes and research methodologies which they represent or gloss. There is no doubt that the concept *performance* has changed in the last 20 years, both in academe and in practice. Its generalist character, signifying the good a service might do for its clientele, has been sharpened by the injection of quantitative thinking. The trend is largely due to increasing emphasis in library and information work upon the managerial approach and its quantitative assumptions and methods. We find this reflected in the definitions which writers use. General usages can easily be found, e.g. we read that performance can be seen in relation to objectives which an organisation sets for itself, objectives which form yardsticks against which performance can be assessed. Despite its atmosphere of quantitative measurement, this statement is in fact very unfocused: its yardsticks are mere metaphors, and its assessment is diffusely conceived, perhaps in terms of managers looking at performance using experience, judgement and hunches and coming to a snap decision. In any event, the ramifications, particularly those in terms of quantitative analysis, are not just absent: they are not even hinted at; they seem to be no part of whatever deep agenda exists under the proposition.

Quantitative indicators

We see that definitions of performance begin to change as writers move through the 1970s and 1980s. Performance measures are defined, in 1982, as 'being the process of systematically assessing effectiveness against a predetermined norm, standard or expressed goal'²⁰. Systematically the adverb is very revealing, suggesting quantitative approaches are not just desirable but customary (a much more revealing criterion), and, while admitting general concepts like goals, emphasising norms and standards which are consensually agreed as being more technical and precise and objective. Overt statements about the quantitative character of performance measures can readily be found in the literature. For example, Charles McClure says that 'performance measures are quantitative indicators of

an organisation's ability to accomplish objectives and respond to the needs of individuals using the system'²¹. Here we see how assumptions are readily made about the general acceptance of the deep agenda and how not just individual concepts but whole systems of concepts have migrated from classical management to public sector management, suggesting new linguistic norms and professional self-concepts.

The definitional and conceptual strategies which have been discussed here can be found in many contemporary sources. In fact, the thought patterns of many writers reflect the drift described in this paper. Performance can first be defined in terms of inputs and outputs²² breaking the concept into traditional components *and* at the same time reflecting an awareness of abstract/concrete dimensions to the concept. The concept is further contextualised by showing how good performance will lead to organisational effectiveness and will provide a sound basis for planning. The discussion continues '... performance measurement involves the establishment of library objectives based on user needs, the expression of these objectives in quantifiable units, the measurement of the units, and the assessment of library performance vis-a-vis its stated objectives'. We find this concept elsewhere too^{23,24}.

We find this in different forms of argument, where the way in which the writer argues his case reveals how he conceptualises about performance *and* about its matrix of associated concepts as they are seen by fellow professionals. We see this in Hamburg *et al*²⁵ where the argument starts by considering performance in terms of social objectives. It is argued that a clear view of performance cannot be found in that way. So we are told *to step back* 'in order to measure these ultimate benefits in a less direct, but perhaps more feasible manner'. The advice given focuses upon the interface between supplier and user, but even here 'it is difficult to isolate library effects from effects' of other types. So '*taking one more small step back from ultimate benefits*, we focus upon the *sine qua non* of library activity, the most important aspect of all public and university library objectives – *exposure of individuals to documents of recorded human experience*'. The movement of the argument *and* the implications for concept use here are very interesting. Procedurally, the writer decides that, unless these steps back are taken, no real clarification of the concept in real terms can be made. Then there is, substantively, a set of definitional assumptions made about what performance is and how it can be defined by its cognate concepts. Generalistic conceptions of the concept of performance have now been jettisoned in favour of quantitative ones, hence the two steps back which the writer suggests we take. Also important is the notion that having taken these steps back, there is a *sine qua non* to be found there. Without that it is argued, there is nothing.

Is this the deep agenda to which we referred earlier? It could well be. In current thinking about concepts like performance, consensual usage would recommend, and give credence to, an essentially quantitative conception of the concept of performance. If that dimension is removed, all we

arguably have is feathers, or traditionalistic meanings which have been superseded. The extent to which such conceptions are generally held needs research. It could be that other fashions or schools of thought would reject such an argument and wish to dissociate themselves from it. Moreover, it is fair to say, that taken to its ultimate extreme, the quantitative approach to performance might become merely mathematical and ignore the valuable components of experience and judgement²⁶.

Looking at the notion or conception of performance, we can see that it is pluralistic and migratory, has been used theoretically and empirically, has been defined by its components and by its associates, and has been the subject of historiographic attention. More important, it has moved with the times, or been moved by them, in acquiring greater quotients of quantitative management, and in demonstrating less power to convince without them. Most of all, it is possible to argue that deep agenda or *sine qua non* dimensions exist in, or are attributed to, such concepts as performance, whether subjectively by users or more definitively in a dictionary sense, and that the elicitation of those deep agenda may well prove the most interesting part of the search.

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APPENDIX VI

Survey of managerial competences

Survey of Managerial Competences

We are interested to know what competences you regard as important in middle and senior management in your library or information service.

The competences listed below are organised under three headings :

- (1) Managing the service
- (2) Managing the finance
- (3) Managing the people

Beside each competence there is a scale for you to record your view about its importance.

Please put a RING round the number which in your view best reflects your view.

The scale is as follows :

- 1. Very important
- 2. Important
- 3. Neutral
- 4. Unimportant
- 5. Very unimportant

We are interested to know what you think, if you are a MIDDLE or a SENIOR manager. [Note to reader of the thesis : the position of the respondent was established in associated correspondence.]

We are also interested to know whether you think middle and senior managers have or should have any of these competences. So please put a ring round the number as it applies to you AND as you think it applies to either *middle managers who work for you OR senior managers you work for*. There should therefore be TWO rings, one in each column, against each competence.

Competences	Middle Managers	Senior Managers
Managing the service		
1. Ability to define aims of service	1 2 3 4 5	1 2 3 4 5
2. Ability to identify key objectives	1 2 3 4 5	1 2 3 4 5
3. Ability to formulate plans for the service	1 2 3 4 5	1 2 3 4 5
4. Ability to set up procedures for service delivery	1 2 3 4 5	1 2 3 4 5
5. Ability to keep procedures up-to-date	1 2 3 4 5	1 2 3 4 5
6. Ability to utilise computerised systems	1 2 3 4 5	1 2 3 4 5
7. Ability to make decisions from management information	1 2 3 4 5	1 2 3 4 5
8. Ability to organise the service for use	1 2 3 4 5	1 2 3 4 5
9. Ability identify user needs	1 2 3 4 5	1 2 3 4 5
10. Ability to monitor user wants	1 2 3 4 5	1 2 3 4 5
11. Knowing how to enhance impact on the community	1 2 3 4 5	1 2 3 4 5
12. Familiarity with marketing techniques	1 2 3 4 5	1 2 3 4 5
13. Knowing how to achieve results	1 2 3 4 5	1 2 3 4 5
14. Knowing how to set priorities	1 2 3 4 5	1 2 3 4 5
15. Being realistic about what is achievable	1 2 3 4 5	1 2 3 4 5
16. Being able to write effective reports	1 2 3 4 5	1 2 3 4 5
17. Having effective presentation skills	1 2 3 4 5	1 2 3 4 5

/PTO

Managing the finance

18. Knowing how to get adequate funding	1 2 3 4 5	1 2 3 4 5
19. Ability to allocate money to activities	1 2 3 4 5	1 2 3 4 5
20. Knowing how to handle the budget	1 2 3 4 5	1 2 3 4 5
21. Knowing how to generate income for the service	1 2 3 4 5	1 2 3 4 5
22. Knowing how to cost services and products	1 2 3 4 5	1 2 3 4 5
23. Knowing how to run services as cost centres	1 2 3 4 5	1 2 3 4 5
24. Ability to understand and utilise numeric data	1 2 3 4 5	1 2 3 4 5
25. Feeling at ease in financial discussions	1 2 3 4 5	1 2 3 4 5
26. Knowing how to put a good case for funding at meetings with superiors	1 2 3 4 5	1 2 3 4 5

Managing the people

27. Ability to pick the right staff	1 2 3 4 5	1 2 3 4 5
28. Ability to allocate the right jobs to staff	1 2 3 4 5	1 2 3 4 5
29. Knowing how to get productive work from staff	1 2 3 4 5	1 2 3 4 5
30. Knowing how to motivate your staff	1 2 3 4 5	1 2 3 4 5
31. Knowing how to build effective teams	1 2 3 4 5	1 2 3 4 5
32. Knowing how to get your staff to achieve results	1 2 3 4 5	1 2 3 4 5
33. Knowing how to negotiate effectively	1 2 3 4 5	1 2 3 4 5

/PTO

34. Knowing how to identify future staffing needs	1 2 3 4 5	1 2 3 4 5
35. Knowing how to relate well to others	1 2 3 4 5	1 2 3 4 5
36. Understanding the needs of others	1 2 3 4 5	1 2 3 4 5
37. Ability to maintain a positive self-image	1 2 3 4 5	1 2 3 4 5
38. Knowing how to take difficult decisions	1 2 3 4 5	1 2 3 4 5
39. Showing self-confidence and drive	1 2 3 4 5	1 2 3 4 5

Thank you for taking part in this survey of managerial competences. We hope that you have found it interesting to identify what you think effective managers should know and be able to do.

Please return the completed survey to the address shown on the accompanying letter. [this refers to the research being conducted, expresses the hope that respondents will wish to assist in the questionnaire, and provides information about the researcher, addresses, and the like.]

APPENDIX VII

Exercise on being 'young' and 'good'

AN EXERCISE

This exercise aims to find out what you think about people. In particular, it wants you to say what you think about being *young* and being *old*. Please answer the questions underneath as honestly as you can, and hand the sheet back when you have finished.

1. Who would you most like to work closely with ? (number in order of preference)

- 1.1 people my own age
 - 1.2 people older than me
 - 1.3 people younger than me
 - 1.4 people of any working age
-

2. In your view, which of the age groups below seems to you to represent a professional librarian at their peak? (please put a ring round one band for each category)

- 2.1. WOMEN : 20-25 25-30 30-35 35-40 40-45 45-50 50-55 55-60
- 2.2 MEN : 20-25 25-30 30-35 35-40 40-45 45-50 50-55 55-60
-

3. Which of the following would, in your view, have greatest difficulty in coping with change in a library? (number in order of preference, see end)

3.1 Stephen, 27, born Glasgow, qualified 1985, work to date in public branch library in Arbroath.

3.2 Carol, 32, born Oslo of British parents, qualified as mature student two years ago, work to date with small information unit in oil industry in Aberdeen.

3.3 Muriel, 47, widow with 3 grown-up married children, 20 years as housewife, qualified with First Class Honours last year, prize project on thesaurus construction, unemployed to date but looking for work.

3.4 Alasdair, 22, born Edinburgh, BSc (Geology) from Edinburgh University, qualified last year, non-professional work to date in Edinburgh University Library.

3.5 Isobel, 52, born Sheffield, ten years part-time librarian with Highland Region, and twenty years as Library Assistant in Bulmer College of FE in Derby.

3.6 Karen, 37, born London, City & Guilds Exams 1976, secretarial experience (audio-typing, book-keeping etc etc) with City firm 1972-83, qualified 1987, work to date with computer company in Cumbernauld.

3.7 Duncan, 42, born Southampton, degree in History and French, eight years teaching at secondary school in Carlisle, left teaching and qualified 1979, work to date in public library lending and reference departments Dundee public libraries, heavy involvement in local history and genealogy.

I think that would best cope with change in a library. Then

2.....	then	3.....
4.....	then	5.....
6.....		7.....

.....would best cope with change because
.....
.....

.....would worst cope with change because.....
.....
.....

4. When do you think the following items would be considered 'old'?

- 4.1 a car : after year(s).
- 4.2 a coat : after year(s).
- 4.3 a degree : afteryear(s).
- 4.4 a woman : after year(s).
- 4.5 a man : after year(s).

5. Please complete the following statements:

5.1 She had worked there for ten years and [enter (a),(b),or (c) as being the most likely in your view] ..(..):

- (a) was reluctant to change her ways
- (b) was keen to change the way the job was done
- (c) felt she did a very satisfying job

5.2 He was approaching forty and [enter (a),(b),(c) or (d) as being the most likely in your view] ..(..):

- (a) felt he had passed his best
- (b) looked forward to 30 more years of productive work
- (c) wanted to change the world, at least his part of it
- (d) was content to let younger better people pass him by

When you have finished these questions to your satisfaction, please hand the exercise in. Thank you for taking part.

APPENDIX VIII

Scalogram analysis of concept change
in learners

PART A

'Before' test : stage 1

(N = 30) (y = yes, n = no) (score = number of 'yes' responses)

RESPONDENT	1	2	3	4	ITEM 5	6	7	8	SCORE
1	y	y	y	y	y	y	n	y	7
2	y	y	y	n	n	y	y	y	6
3	y	y	y	n	n	n	n	y	4
4	y	n	y	y	n	n	y	y	5
5	y	n	y	n	n	y	y	y	5
6	y	n	y	n	n	y	n	y	4
7	y	y	y	n	n	n	y	y	5
8	y	n	y	y	n	n	y	y	5
9	y	y	y	n	n	n	y	y	5
10	y	n	y	n	y	y	y	y	6
11	y	y	y	n	n	n	y	y	5
12	y	y	y	n	n	y	n	y	5
13	y	y	y	y	n	n	n	y	5
14	y	y	y	n	n	y	n	y	5
15	y	n	y	n	y	n	n	y	4
16	y	y	y	n	n	y	y	y	6
17	y	n	y	n	n	n	y	y	4
18	y	n	y	n	n	y	y	n	4
19	y	y	y	y	n	n	y	y	6
20	y	n	y	y	n	y	y	y	6
21	y	n	y	n	n	y	n	y	4
22	y	n	y	y	y	y	y	y	7
23	y	y	y	y	n	y	n	y	6
24	y	n	y	y	n	n	n	y	4
25	y	n	y	n	n	n	y	y	4
26	y	n	y	y	n	n	n	y	4
27	y	n	y	y	n	n	y	y	5
28	y	n	y	n	n	n	n	y	3
29	y	n	y	y	n	n	n	y	4
30	y	n	y	n	n	y	n	y	4

PART B

'Before' test : stage 2

RESPONDENT	ITEM								SCORE
	1	2	3	4	5	6	7	8	
1	y	y	y	y	y	y	n	y	7
22	y	n	y	y	y	y	y	y	7
2	y	y	y	n	n	y	y	y	6
10	y	n	y	n	y	y	y	y	6
16	y	y	y	n	n	y	y	y	6
19	y	y	y	y	n	n	y	y	6
20	y	n	y	y	n	y	y	y	6
23	y	y	y	y	n	y	n	y	6
4	y	n	y	y	n	n	y	y	5
5	y	n	y	n	n	y	y	y	5
7	y	y	y	n	n	n	y	y	5
8	y	n	y	y	n	n	y	y	5
9	y	y	y	n	n	n	y	y	5
11	y	y	y	n	n	n	y	y	5
12	y	y	y	n	n	y	n	y	5
13	y	y	y	y	n	n	n	y	5
14	y	y	y	n	n	y	n	y	5
27	y	n	y	y	n	n	y	y	5
3	y	y	y	n	n	n	n	y	4
6	y	n	y	n	n	y	n	y	4
15	y	n	y	n	y	n	n	y	4
17	y	n	y	n	n	n	y	y	4
18	y	n	y	n	n	y	y	n	4
21	y	n	y	n	n	y	n	y	4
24	y	n	y	y	n	n	n	y	4
25	y	n	y	n	n	n	y	y	4
26	y	n	y	y	n	n	n	y	4
29	y	n	y	y	n	n	n	y	4
30	y	n	y	n	n	y	n	y	4
28	y	n	y	n	n	n	n	y	3
N = 30	30	12	30	12	4	14	16	29	

PART C

'Before' test : stage 3

RESPONDENT	1	3	8	7	ITEM 6	2	4	5	SCORE
1	y	y	y	n	y	y	y	y	7
22	y	y	y	y	y	n	y	y	7
2	y	y	y	y	y	y	n	n	6
10	y	y	y	y	y	n	n	y	6
16	y	y	y	y	y	y	n	n	6
19	y	y	y	y	n	y	y	n	6
20	y	y	y	y	y	n	y	n	6
23	y	y	y	n	y	y	y	n	6
4	y	y	y	y	n	n	y	n	5
5	y	y	y	y	y	n	n	n	5
7	y	y	y	y	n	y	n	n	5
8	y	y	y	y	n	n	y	n	5
9	y	y	y	y	n	y	n	n	5
11	y	y	y	y	n	y	n	n	5
12	y	y	y	n	y	y	n	n	5
13	y	y	y	n	n	y	y	n	5
14	y	y	y	n	y	y	n	n	5
27	y	y	y	y	n	n	y	n	5
3	y	y	y	n	n	y	n	n	4
6	y	y	y	n	y	n	n	n	4
15	y	y	y	n	n	n	n	y	4
17	y	y	y	y	n	n	n	n	4
18	y	y	n	y	y	n	n	n	4
21	y	y	y	n	y	n	n	n	4
24	y	y	y	n	n	n	y	n	4
25	y	y	y	y	n	n	n	n	4
26	y	y	y	n	n	n	y	n	4
29	y	y	y	n	n	n	y	n	4
30	y	y	y	n	y	n	n	n	4
28	y	y	y	n	n	n	n	n	3
N = 30	30	30	29	16	14	12	12	4	

PART D

'Before' test : stage 4

RESPONDENT	ITEM								SCORE
	1	3	8	7	6	2	4	5	
22	y	y	y	y	y	-	y	y	7
1	y	y	y	-	y	y	y	y	7
10	y	y	y	y	y	-	-	y	6
19	y	y	y	y	-	y	y		6
20	y	y	y	y	y	-	y		6
23	y	y	y	-	y	y	y		6
2	y	y	y	y	y	y	-		6
16	y	y	y	y	y	y	-		6
4	y	y	y	y	-	-	y		5
8	y	y	y	y	-	-	y		5
13	y	y	y	-	-	y	y		5
27	y	y	y	y	-	-	y		5
7	y	y	y	y	-	y			5
9	y	y	y	y	-	y			5
11	y	y	y	-	y	y			5
12	y	y	y	y	-	y			5
14	y	y	y	-	y	y			5
5	y	y	y	y	y				5
15	y	y	y	-	-			y	4
24	y	y	y	-	-		y		4
26	y	y	y	-	-		y		4
29	y	y	y	-	-		y		4
3	y	y	y	-	-	y			4
6	y	y	y	-	y				4
18	y	y	-	y	y				4
21	y	y	y	-	y				4
30	y	y	y	-	y				4
17	y	y	y	y					4
25	y	y	y	y					4
28	y	y	y						3
N = 30	30	30	29	16	14	12	12	4	av = 4.9 SD = 0.995

PART E

'After' test : stage 4 [stages 1-3 follow pattern of Parts A-C]

RESPONDENT	ITEM								SCORE
	1	3	8	2	7	6	4	5	
3	y	y	y	y	y	y	y	y	8
7	y	y	y	y	y	y	y	y	8
14	y	y	-	y	y	y	y	y	7
6	y	y	y	y	y	y	y		7
19	y	y	y	y	y	y	y		7
23	y	y	y	y	y	y	y		7
22	y	y	-	-	y	y	y	y	6
30	y	y	y	-	y	y	-	y	6
1	y	y	y	y	y	-	y		6
4	y	y	y	y	-	y	y		6
16	y	y	y	y	y	y	-		6
29	y	y	y	y	y	y	-		6
10	y	y	y	y	-	-	y		5
17	y	y	y	-	y	-	y		5
26	y	y	y	-	-	y	y		5
2	y	y	y	y	-	y			5
8	y	y	y	-	y	y			5
15	y	y	y	y	-	y			5
21	y	y	y	y	-	y			5
12	y	y	y	y	y				5
13	y	y	y	y	y				5
16	y	y	y	y	y				5
20	y	y	y	y	y				5
28	y	y	y	y	y				5
9	y	y	y	-	-			y	4
25	y	y	y	-	-		y		4
18	y	y	y	-	y				4
27	y	y	y	-	y				4
5	y	y	y	y					4
24	y	y	y	y					4
N = 30	30	30	28	21	20	14	13	6	av = 5.467 SD = 1.167

APPENDIX IX

A Bayesian approach to library work

Source : Library Management 11 (6) 1990 26-9

A BAYESIAN APPROACH TO LIBRARY WORK

Stuart Hannabuss

All kinds of things happen to us. Many of them we bring upon ourselves. It is an instinct of rational people to find reasons and causes for them, an underlying logic bringing such things about. It may be providence or probability or contingency. And, since only hindsight is the real 20/20 vision we have, it is sometimes a pity.

We have experience to help us along. Knowing the patterns of the weather, we may decide to take an umbrella or not. It will probably not rain today, and therefore I shall not take an umbrella, we say. This is a probability statement of the kind most of us make every day. Today is unique, unlike any other day, but nevertheless we can make such a statement quite reasonably.

We could be a little less subjective if we took notes about the weather. Over the last ten days, for instance, or better still over the last ten months. If, over the last ten days, there had been seven days of rain and three of sunshine, then there would be a probability of 0.7 for rain and 0.3 for sunshine. Such numbers are always parts of 1 or unity or 100 per cent. If, on the other hand, of those ten days, three were rainy, two were sunny, and five were mixed, then there would be probabilities of 0.3, 0.2, and 0.5, respectively.

All we have done is to draw upon knowledge and experience of a set of events or phenomena, and translated our knowledge into simple numerical notation. We can take this one step further by calling events by letters: so that the three rainy days are event A, hence the probability of A is 0.3. This is $P(A) = 0.3$. Sunny days are event B, so $P(B) = 0.2$. Mixed days are event C, so $P(C) = 0.5$. The probability of it *not* being sunny is $1 - P(A \text{ and } B) = 0.8$, and so on.

Such elaborations to probability statements draw on both subjective and objective factors. They are both qualitative and quantitative. The numbers only make sense if (a) you do them right and (b) you base them

on plausible realities. If not, it is just a solemn game, signifying nothing.

It is useful, therefore, to have a way of expressing our uncertainty of what the world is like. Probability statements enable us to do this. We may assume that many events are repeated, like rainy and sunny days, making probability statements relatively easy to formulate.

However, in the workplace, many events are not repeated. Business decisions, for instance, are often made about a unique combination of circumstances, like marketing a brand new product, best guesses often made from intuition and experience (i.e. subjective probability). In library and information work, too, similar things occur. Decisions in the budgetary cycle, or in dealings with suppliers, or with staff, may have "generic" characteristics in common with other or previous similar events, but may well in themselves be unique.

Traditionally, in statistics, the approach is to predict outcomes from known probabilities, as in our example of the weather. But it is also useful to estimate probabilities from known outcomes. This is the Bayesian approach.

Bayes' Theorem is a formula for calculating conditional probabilities when the outcome is known. If we already have observed an outcome from an event or activity or decision, then we can estimate the probability that a particular event happened which conditioned that outcome.

An example may help to make this clear. A library service has three suppliers, say, for books. It is known that supplier A supplies 60 per cent of the books acquired. Supplier B supplies 30 per cent and supplier C 10 per cent. Facts like this can easily be determined from information. This is what we know already, at the start.

Faults or mistakes can occur. For instance, the wrong books may be sent, or misbound

books may be sent, or mistakes can be made with invoices. We may assume that the library has been dealing with all suppliers for long enough to know and assess factors like this. Let's say that 1 per cent of what A supplies goes wrong (i.e. one book in a 100, one order for every 100 orders), 5 per cent for B and 10 per cent for C. In notation, these figures are 0.01, 0.05, and 0.1, respectively. We can then infer that, for A, we have fault-free service 99 per cent of the time (0.99), for B, we have such service 95 per cent of the time (0.95), and, for C, we have such service 90 per cent of the time (0.9).

We can then determine what the actual probabilities of these suppliers supplying faulty goods are. It will be different from the original probabilities because there are particular events which now condition the outcomes, events which arise from examining what you have actually found in their orders recently. Looking at supplier A, we are able to calculate a *new* probability (i.e. other than the 0.01 or 1 per cent which we started with), given this new information.

Supplier A supplies 60 per cent of what you need (0.6). Of these, 1 per cent (0.01) are faulty. We multiply 0.6 by 0.01 to derive 0.006. In the same way, we can calculate the probability of supplier A supplying fault-free orders: we multiply 0.6 by (1.0-0.01), this is 0.99 and we set 0.594.

Similarly, we can calculate the other probabilities for supplier B (faulty = $0.3 \times 0.05 = 0.015$, fault-free = $0.3 \times 0.95 = 0.285$), and for supplier C (faulty = $0.1 \times 0.1 = 0.01$, fault-free = $0.1 \times 0.9 = 0.09$). The probability of finding a fault with all suppliers is $0.006 + 0.015 + 0.01 = 0.031$.

But we also have the probability of the fault given that the supplier is A. Under such conditions, the probability of A and the fault is made up of (1) the probability of the fault and (2) the probability of A given the fault. We take this further in the following manner:

$$P(A \text{ and fault}) = P(\text{fault}) \times P(A \text{ given the fault})$$

which is,

$$P(A \text{ given the fault}) = [P(A \text{ and the fault})]/[P(\text{fault})].$$

In this example, the answer is 0.006 divided by 0.031 = 0.1935.

What we now have is the probability based on far more information than at the start. We have built into our calculation the

conditional probability of the fault coming from supplier A. We have found that, far from being 0.6, which is what we started with, we now have 0.194. It is then possible to subject all suppliers to the same form of analysis, in order to decide which one is the most likely one to have produced the fault. Doing this reveals that the probability of B is 0.484 and C 0.323. Since the figure for B is larger than the others, it is likely that B is the supplier to blame.

We have been able to consider probabilities under conditions of new information. This information we would obtain in the normal way of dealing with the suppliers. There is nothing to stop a library carrying out this analysis at any stage of dealing, apart from times too soon for there to be reliable initial information.

A library manager may choose to watch things happen and fire-fight when mistakes occur. Struggling to find them out in advance may seem to be a form of masochism. On the other hand, such a manager may be heartened to know that she can make use of her subjective estimates of the likelihood of given events occurring, and alter them as supplementary information reaches her. After all, Bayes enables us to estimate probabilities from known outcomes.

Historians may cast a wry glance into the 18th century when an English clergyman, the Reverend Thomas Bayes (1702-1761) first devised these ideas. It has been said of him that, as a clergyman believing faithfully in certain outcomes to life and death, he should not have been dabbling in statistical uncertainties.

The theorem is much fuller than we have implied. It allows us to estimate, given an observed outcome of an event or decision, the probability that a particular event or series of events occurred which conditioned the outcome.

Let's call an event B, and B happens only when it is preceded by another event A. A exists in a series of mutually exclusive events (A1, A2, ..., An). Event B is known to have occurred. Then we can determine the probability of it having been preceded by a particular one of the A series of events. We do this by multiplying the probability of the A event by the probability of it being followed by B, expressed as a ratio of all such possible combinations. So, if P(A1), P(A2), and so on are the probabilities of A1, A2, and so on, and B is the outcome which results from (that is to say, conditional upon), A, then Bayes' theorem proposes this:

$$P(A1|B) = \frac{P(B|A1).P(A1)}{P(B|A1).P(A1) + P(B|A2).P(A2) + \dots P(B|An).P(An)}$$

We might apply this to a group of five library users. The sample is small for simplicity's sake. These users may consist of people with three or more books out, and those with fewer. Or users who wish to use the library for purposes of study, and those who wish to borrow books and go straight out again. The descriptors can be what we decide as relevant. Here, we will say that this group of five users consists either of two who wish to study (S) and three who wish to borrow (B), or of 4 S and 1 B users.

The actual composition of the group is now known to us. We shall use Bayes' Theorem to work this out, using the distribution in a sample of one user. Given the present evidence, we can frame two hypotheses based on the putative number of S's. Our first hypothesis is that the proportion of S's is 0.4 (i.e. two of five users in group one), and our second is that this proportion is 0.8 (i.e. four of five users in group two). We can assume, too, that under present conditions of information we might expect the two group compositions to be equally likely. From this, we can deduce that the prior probability in group one, $P(H1)$, is 0.5, and that in group two, $P(H2)$, is 0.5. Our sample of one user happens to be a user who wishes to use the library to study.

If H1 represents the true situation, then there really are three users who want to study in that group of five, and therefore the probability of a random user being an S is 0.6 (three from five). We can represent this as the conditional probability $P(S|H1) = 0.6$. In the same way, if H2 represents the true situation, then the conditional probability is shown as $P(S|H2) = 0.2$.

Using Bayes' Theorem, we can insert the appropriate numbers:

$$P(H1|S) = \frac{(0.6)(0.5)}{(0.6)(0.5) + (0.2)(0.5)} = \frac{0.3}{0.4} = 0.75$$

The result for H2, using the same route, is 0.25. Both 0.75 and 0.25 are what are known as posterior probabilities, to distinguish them from the prior probabilities of 0.5 and 0.5 for the two groups.

By examining the sample of one user, and with the information we now know, we have altered our view about the unknown composition of each group. Instead of thinking that the two compositions are equally possible (0.5), we now know, after carrying out the sampling, that the 2-3

mix (i.e. group one) is much more likely than the 4-1 mix (i.e. group two). The probability of this being so is three times greater for the first than for the second. Therefore, hypothesis one (H1) is much more likely.

One strictly pragmatic answer to this is to say that we should simply ask the users concerned. But this method enables us to examine the probability that any two such groups, real or notional, might be made up this way. Bayes' Theorem is a way of reviewing the probabilities when extra information is given. Focused applications can be made within particular user groups, or within specific time intervals, to make the analysis more sensitive.

It is possible to use this method for examining more complex matters in library and information work. Imagine a library operating under normal circumstances. It is working within a budgetary cycle. It knows that there are three budgetary scenarios under which it might operate in the next financial year. The scenarios are: (1) ask for £*n* (not really enough); (2) ask for £*n* and expect to ask for a supplementary £*m* during the year (just about enough); and (3) ask for £*n* + 25 per cent (probably enough with some to spare).

We can represent this whole situation in the form of a decision tree (Figure 1). Three scenarios are represented, each with its probability. The probabilities would derive from the librarians' experience and judgement. The probability of scenario 1 is 0.5, of 2 is 0.3, and of 3 is 0.2.

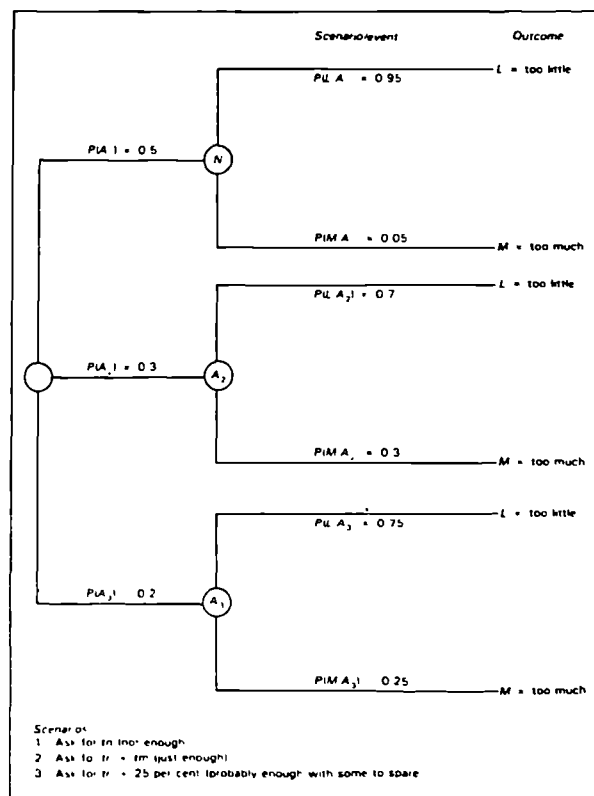


FIGURE 1.

Looking at scenario 1, there is a high probability that that budget allocation will be too little (0.95), a very small probability that it will be enough (0.05). Notice that these two probabilities add up to 1 or 100 per cent. It is then possible to calculate the probabilities of there being too little under scenario 1 ($0.5 \times 0.95 = 0.475$) and too much ($0.5 \times 0.05 = 0.025$).

Similar attributions and calculations can be carried out with the two other scenarios. The probability of there being too little in scenario 2 is ($0.3 \times 0.7 = 0.21$) and too much ($0.3 \times 0.3 = 0.09$). The probability of there being too little in scenario 3 is ($0.2 \times 0.75 = 0.15$) and too much ($0.2 \times 0.25 = 0.05$). These are conditional probabilities as the diagram demonstrates (e.g. $P(L|A1)$, i.e. the probability of there being too little given scenario A. These figures can now be used in Bayes' Theorem. We can work through the three scenarios:

$$P(L|A1) = \frac{(0.95)(0.5)}{(0.95)(0.5) + (0.7)(0.3) + (0.75)(0.2)} = 0.569$$

$$P(L|A2) = \frac{(0.7)(0.3)}{(0.95)(0.5) + (0.7)(0.3) + (0.75)(0.2)} = 0.251$$

$$P(L|A3) = \frac{(0.75)(0.2)}{(0.95)(0.5) + (0.7)(0.3) + (0.75)(0.2)} = 0.179$$

Through deriving these three conditional probabilities for the three scenarios, we are now in a better position to evaluate which course of action to take. At the start, using subjective probability, we were able to attribute the three scenarios with the probabilities of 0.5, 0.3, and 0.2. In the light of further information, arising from asking questions about what the probabilities of particular budgetary options *conditional upon particular scenarios*, we are now able to amend our original information.

Scenario 1 has changed from 0.5 to 0.569. Scenario 2 has changed from 0.3 to 0.251. Scenario 3 has changed from 0.2 to 0.179. In other words, scenario 1 looks more likely than before to prove too little a budget, while the other two scenarios look less likely than before to do the same. The extra information has made scenario 1 even less attractive than before in terms of yielding up the kind of money the library needs. The librarian would probably be moving in that direction anyway: Bayesian analysis has helped to confirm the likelihoods in the decision-making process.

In all cases here, we have asked for situations where *too little* would occur (that is why we were handling 0.95, 0.7 and 0.75). If we had been asking about situations where

too much would occur, we would use the figures 0.05, 0.3 and 0.25, again with their respective scenario probabilities.

Once again we have been able to estimate probabilities from known outcomes, and review probabilities when extra information becomes available. Both of these are useful for managers when they draw upon known information about events and activities, and wish to consider how probable the alternative options may be. The three examples, on the performance of suppliers, the composition of users, and the likely outcomes from budgetary decisions, are all typical of library work. Applications in the field of information retrieval have deliberately been omitted.

There are many discussions about probability, and increasing numbers in library and information literature. Information about Bayes' Theorem tends to be applied to production processes in industry, and is therefore difficult easily to relate to library work. This article has aimed to suggest some of the ways in which conditional probability in general, and Bayes' Theorem in particular, can be used to help analyse and elucidate some areas of library work.

□

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Stuart Hannabuss is Lecturer at the School of Librarianship and Information Studies, RGIT, Aberdeen.

APPENDIX X

A decision matrix approach to decision
making in libraries

Source : Hannabuss, S (1987) Knowledge management.

MCB University Press. Pages 17-27.

3. A Decision Matrix Approach to Decision Making in Libraries

Introduction

Successful management and planning in libraries and information services needs ever more emphasis on facts and figures as cuts bite. Intuition and experience are still worth their weight in gold, of course, but in addition to these, effective management needs analytical and proactive skills and attitudes. Such analysis and skills are based on the quantitative approach, on close attention to movements of cash in budgets, ratios between staff and users at service points and at stress foci, and the optimum movement and delivery of documents to the user communities.

Matters like these depend on clear-sighted and soundly based decision making. We are all experts in taking decisions, yet, if we are honest with ourselves, part of this expertise lies in knowing that decisions are often hard to take. Often, there are competing choices. We often do not know the possible outcomes. Choices may be mutually exclusive. We lack the necessary information to make a correct choice, or the necessary will to carry it through. In organisations, there are other people, above and below, to persuade and carry along with these decisions. Acts of God and other contingencies throw even the best decisions awry.

Decision making, then, is usually faced with competing choices and unknown consequences. Much hangs on outcomes, because money, time, goodwill and "face" can all be lost. Even "correct" choices can, through providential refractions, turn out to be wrong, or to be considered wrong by colleagues. Much of the time we make choices under conditions of uncertainty. Having said that, we should acknowledge that not all is unknown. We know, for instance, the cost of acquisitions, overheads within particular departments, salaries incurred by particular cohorts of staff, hours during which service points are open, periodicity of issue figures through week or term, and the rental fee for the photocopiers. From all these phenomena, we gain managerial data on inputs and outputs, data which we can use to analyse present costs and incomes, and to extrapolate trends, averages and correlations, if we choose. Properly, managers seek to contextualise such data, and such methodologies of thinking, within the practical and experiential setting of the library or information service.

As managers, much of our time is reactive, as we react to events which occur and make fire-fighting decisions in the attempt to put them right. The theory always tells us that managers should be proactive, looking and planning ahead, anticipating pressure points and policy threats, devising schemes that will, if based on proper theory and facts, provide the best service within feasible and cost-effective limits. Sometimes, such schemes are called strategic plans, particularly if we see them reaching far into the future. However we do this, there is always a large component of risk and uncertainty, since we live and work in an unpredictable world.

Choice and Probability

It would be facile to argue that this world is deterministic. This position could be reached in various ways, for instance, if we argued from a position of consummate pessimism that things always went wrong and would not stop changing their ways for us. It could also be reached if we placed too doctrinaire an emphasis on the behaviour of data, suggesting that particular patterns and trends reproduced themselves in regular cycles, spiralling ever downwards and creating anarchy. Far more plausible is the argument that suggests that the world which managers inhabit is *probabilistic*. So, from this assumption, we might argue that in decision making we are able to analyse several different options and extrapolate the consequences likely from each. To these options, we can attribute credible and manipulable probabilities, i.e. the probabilities which the options might demonstrate through occurring or not occurring.

Having said that, we should distinguish between different views of it. Theoretical probability is what we find when we draw one card from a pack, while subjective probability depends on a degree of belief, as well as what might happen in a world of independent events (e.g. we believe that a particular party will win an election). For the second to have any reliability, there need to be a consensus, preferably of experts, as the Delphi and other forecasting techniques seek to demonstrate. Strictly, probability theory tells us that the probability with which an event occurs is (a) the number of equally likely favourable outcomes, divided by (b) the total number of equally likely possible outcomes (assuming we are looking for favourable outcomes). It invites us to consider the probability of events, the probability of their opposite (say, heads instead of tails when tossing coins), how we might calculate the probability of two of three things happening at the same time, and so on. An assumption is made that events happen (or are sampled) randomly, and that enough events happen for valid and reliable results to be used.

Decision Trees

A useful way of representing both probability and sets of choices is through using tree diagrams. These are sequential charts that list the possible outcomes at each stage of an experiment, along with the probabilities. From these, we can see at a glance both the sequence of outcomes and their probabilities. From these have grown decision trees which many managers use for decision making and planning. These are simply more elaborate tree diagrams, representing, graphically, the different paths traced by different options (say, if we do this *or* if we do not do it), and comparisons between each can be built into the tree so that differential probabilities can be seen quickly. For instance, it is possible, by multiplying the probabilities along a particular critical path, to calculate the probability of a series of actions. Some readers will recognise in this the underlying principles of the Bayes Theorem.

Decision Matrices

When decisions are made, as many are, under conditions of uncertainty, any number of different outcomes can follow. Some are virtually impossible, like an earthquake knocking down the library. Some are virtually inevitable, like the expenditure of £x and the activities of staff and users. Yet, for managers, it is often useful to be able

to lay out the options and consider them comparatively. The outcomes of the possible combinations of alternative decisions can be represented clearly on a decision matrix. For example, in the matrix below (Table I), we can see four options, from A to D, and three courses of action, from 1 to 3. In each can be reflected possible expenditure or income data, such as money we expect to spend on stock or staff likely to be needed to man a service point under given conditions.

Table I. Decision Matrix			
Events/options	Courses of action		
	1	2	3
A	4	2	1
B	6	3	-3
C	3	3	3
D	2	4	7

From this, it is possible to say that, if the data represent possible pay-offs, under course of action 3, option D stands to gain most (i.e. 7). We might say also that under course of action 3, option B stands to lose most (i.e. -3). Under all three courses of action, option C looks most stable, although we adopt that at the expense of the more attractive possible gains that are offered by some of the others (e.g. option B under course of action 1). We call such outcomes "conditional pay-offs" because they are conditional on our selecting particular options under particular conditions.

Decision matrices are examples of probabilistic decision making in action. They are relatively simple to use, too, and can be used to reflect loss as well as pay-offs. Of course, certain assumptions need to be made. First, that the probabilistic model is, indeed, a valid model for the managerial situation. Second, that it is possible (or people believe it is possible) that phenomena like purchases and servicing, staff, user activities and overheads can all be reflected in numerical form, and this reasoning in turn makes claims on us as managers for an accounting perspective. Having made these assumptions, we may then consider an actual decision matrix at work.

Let us assume we manage a library. We live and work under a particular policy regime, embodied in particular budgeting parameters, with certain stated policy constraints and objectives. We are making a decision, perhaps a global one, about overall expenditure in the near future, or, perhaps, a specific one about the fate of a particular department, activity or staff member. However it is conceptualised, we are able to represent the decision in an analysed form on a decision matrix. For example, we may be able to break down the decision into three major options. We are able, also, to envisage three major courses of action or policy regimes under which those options might be taken. Different outcomes are likely to occur in each case. If we see these outcomes in numerical terms, say, in terms of what are likely to gain (a pay-off) — or by mirror-image what we are likely to lose or not to lose — we are able to put the data into the decision matrix (Table II).

Table II.				
Options	Policy regimes			Maximum pay-offs
	1	2	3	
A	20	50	100	100
B	15	120	60	120
C	80	60	40	80

Having represented the data in this way, and made certain probabilistic assumptions, we still need to build in the *kind of decision making the manager is likely to make because of temperament*. It may be, for instance, that the manager wants the greatest pay-off. He/she may be prepared to gamble that the policy regime will allow this to happen. In this event, the maximum pay-off will be option B under regime 2. In decision theory parlance, this is called the *maximax* criterion. Although the possible pay-off is good, there are real odds against its happening, and many an optimist ends up a bankrupt.

On the other hand, the manager may wish to be very cautious, and wish to look hardest at the minimum pay-offs. This is most likely if we consider pay-offs in terms of losses, where the lowest pay-off is the least risky venture, i.e. the most reasonable incurrable loss. In that event, the decision matrix is changed so that in the far right column we represent the minimum pay-offs, which are, respectively, 20, 15 and 40. In doing this, the manager selects the option which maximises his minimum pay-off; in other words, the manager is applying the *maximin* criterion, and is maximising his minimum possible pay-off.

We can see that not only are the maximax and maximin approaches different numerically, but that they also reflect distinct methods of thinking. Of course, there is a middle position between these two, the so-called *minimax* criterion. The reasoning behind this is as follows. If the manager chooses option C, for example, under regime 1, the pay-off is 80. But, if the manager had chosen option A under regime 1, he/she would have made the wrong decision and there would be regret. This regret would be represented in terms of the difference between the pay-off from the best option and the pay-off from the wrong option: so option A under regime 1 (the "wrong" option here) earns a pay-off of 20, while the "best" option under regime 1 is option C with a pay-off of 80. Accordingly, the difference of 60 is the measure of regret. We can reflect all these regret figures on a decision matrix as shown in Table III.

Table III.				
Options	Policy regimes			Maximum regret
	1	2	3	
A	60	70	0	70
B	65	0	40	65
C	0	60	60	60

For each option, the maximum regret has been identified. If the manager then uses this reasoning for decision making, he/she is applying the minimax criterion.

Expected Monetary Value

But we need to push this argument further, since other factors, like monetary value, are involved. Often managers draw on historical information (i.e. information derived from current and past actuality and practice) for their decisions. What has happened in the past and what is going on at present are, after all, important and valid indicators for performance in the near and far future. It is one step more to attribute probabilities to the various settings within which decision making is likely to take place. For instance, looking at the probability of the policy regimes, it may be that regime 1 has a probability of 0.2 (i.e. of 100 per cent or unity of all possible outcomes, 20 per cent have suggested that regime 1 is dominant). By that token, regime 2 has a probability, say, of 0.7 and regime 3 one of 0.1. Of course, the probabilities have all got to add up to unity, since that represents the ultimate certainty of all and/or anything happening.

Looking ahead five years, the manager may then be able to carry out some simple projections. Let us say that he/she is looking at option 1 under the three different regimes. The figures (from the decision matrix on Table II) are 20, 50 and 100 respectively. Using the simple principle implicit in all weighted averages calculations, we can then calculate what the pay-offs are likely to be. We multiply each pay-off by the probability of the particular regime, aggregate the total, and divide by the number of years to get an average:

$$(2 \times 20) + (7 \times 50) + (1 \times 100) = 490$$

$$\text{Average: } 490 \text{ divided by } 5 = 98$$

Therefore, the average earning is 98 (let us say £00s), and this is known as the *expected monetary value* (EMV) of choosing option 1. By that token, the EMVs of options 2 and 3 are 930 and 620. This EMV figure has a very logical basis, but managers have to be on their guard. Each option may have its pay-off and EMV, yet, in any particular year, the pay-off can be, say, for option 1, 20, 50 or 100. Pay-offs go up and down, and might even incur severe results, suggesting that the maximin approach might be preferable. We also need to consider the time scale itself, and the extent to which planning can validly extend over a period, say, of five years. Libraries generally have time scales imposed on them, and these frequently change, often with short notice. It is wise to consider contingencies like this when calculating and extrapolating with ostensibly reliable figures; after all, they merely reflect external circumstances, and have no directive effect on them, except that effect deriving from wise decision making and forward planning itself.

Probabilities

Another assumption is made. — that of having *perfect information*. In decision making, it is always possible to be right, of course. Many managers, looking at possible choices and consequences, hanker after a crystal ball so as to make surety doubly sure. Unless there is an infallible soothsayer on the staff, managers are obliged to make decisions in states of *imperfect information*. Even so, we may hypothesise a state of perfect information, in order to establish what its value is. In a state of perfect information, the manager would be able to select the correct option under each and any regime,

and so maximise all pay-offs. We may take these maximum pay-offs from the decision matrix in Table II, which are 100, 120 and 80. We can then build in the probabilities with which these regimes are likely to occur, using information described earlier and making the assumption that what will be will be. And so we calculate as follows:

$$(2 \times 100) + (7 \times 120) + (1 \times 80) = 1,120$$

With this figure, we can see, hypothetically, what the pay-off would be in a state of perfect information. We are then interested in knowing what the value of the perfect information is. We find that by comparing our total 1,120 with the totals previously established for EMV for each option, i.e. option 1 with 490, option 2 with 930 and option 3 with 620. Clearly, option 2 yields the best pay-off, i.e. 930. We then note the difference between this best pay-off in a state of imperfect information (930) with the pay-off in a state of perfect information, and the difference is $1,120 - 930 = 190$. This is the value of the perfect information to the manager. Through its use, savings are made. Through its absence, savings are forgone.

But, as all managers know, decision making hardly ever takes place in states of perfect information. Much effort is put into ensuring that the flow of information in the organisation is effective and smooth, and productivity and the quality of decisions are reliant on the timeliness and accuracy of that information. Hence, in recent years, the correct emphasis placed on management information and decision support systems in libraries and information services. Much research and analysis, too, has been carried out into the flow of information through, and in, the communication networks of organisations, with attention to the various roles of gatekeepers, filters and opinion leaders, as well as best configurations within the organisational structure itself.

With this in mind, managers then ask themselves if additional information exists to help in decision making. This additional information has calculable value. We will now fit this further factor into the argument. First of all, as might be expected, we have to make an assumption: that if, and when, we acquire the information, it has a certain reliability. This can be represented numerically, often as a percentage; so, let us say that the reliability of additional information (considered generically for simplicity here) is 90 per cent. Implicit in this manoeuvre is the question: is the information worth getting? (Of course, if the information needs to be bought, or if the acquisition of the information incurs specific capital or recurrent costs, we can readily reflect this concept in numerical terms.)

The tree diagram in Figure 1 seeks to represent the problem in simple terms. We need to build probabilities into the calculation, and we know the probabilities of the three regimes from previous discussion (i.e. regime 1 is 0.2, regime 2 is 0.7, and regime 3 is 0.1). However, these probabilities are conditional: the probabilities of the *actual* regimes are conditional on the *predictions* made about the regimes. Knowing that the additional information (the information on which the predictions will be made) is 90 per cent reliable, we can calculate:

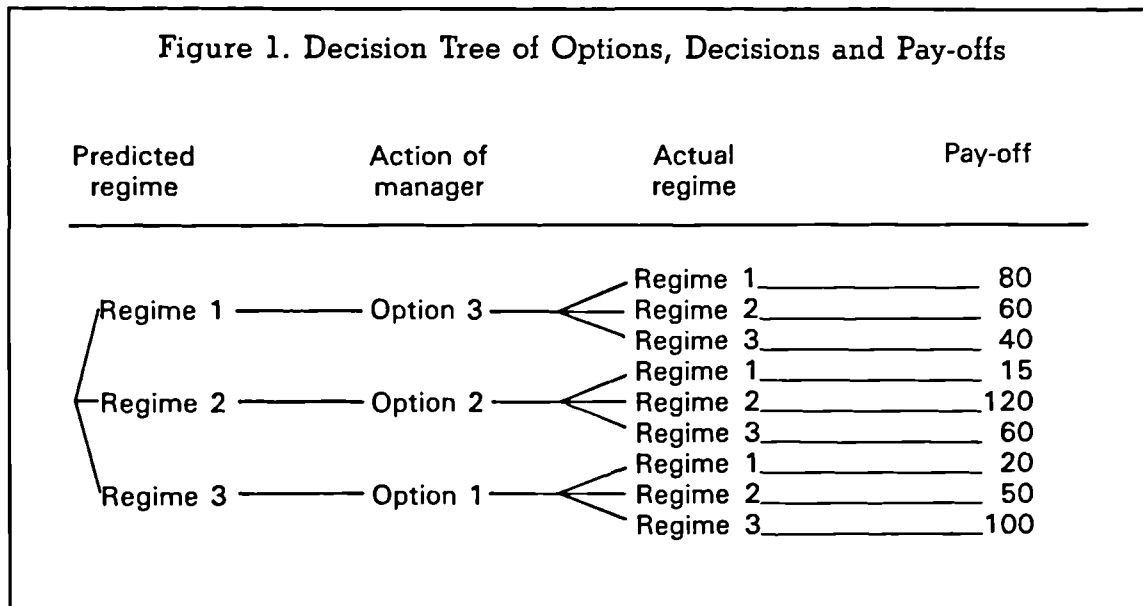
$$P(\text{regime 1/regime 1 predicted}) = 0.9$$

$$P(\text{regime 2/regime 2 predicted}) = 0.9$$

$$P(\text{regime 3/regime 3 predicted}) = 0.9$$

The vertical slash sign (/) denotes "given that" in probability, and does not imply division. It is all too possible, as we know, for something to be predicted, but for

Figure 1. Decision Tree of Options, Decisions and Pay-offs



something else to happen. We have now to allow for those possibilities (probabilities). If the probability of the right prediction is 90 per cent (i.e. 0.9), and absolute certainty is 100 per cent (i.e. 1.0), then the probability of the *wrong* prediction is 0.1. We use this in further calculations. We also need to recall the ratios between the various regimes, so that, for example, the ratio between regime 2 and regime 1 is 7:1 (there are eight possibilities in all, of course), so

$$P(\text{regime 2/regime 1 predicted}) = 0.1 \times \frac{7}{8} = 0.0875$$

$$P(\text{regime 3/regime 2 predicted}) = 0.1 \times \frac{1}{8} = 0.0125$$

and

$$P(\text{regime 1/regime 2 predicted}) = 0.1 \times \frac{2}{3} = 0.0666$$

$$P(\text{regime 3 regime 2 predicted}) = 0.1 \times \frac{1}{3} = 0.0333$$

$$P(\text{regime 1/regime 3 predicted}) = 0.1 \times \frac{2}{9} = 0.222$$

$$P(\text{regime 2/regime 3 predicted}) = 0.1 \times \frac{7}{9} = 0.777$$

These probabilities can be added to the tree diagram, the joint probabilities calculated (using the multiplication rule), and then, by multiplying joint probability with pay-offs, the EMVs can be found. The tree diagram in Figure 2 represents these data. We then note what we paid for the information, let us say 40 units, and subtract it from the sum total (see Figure 2) of 102.68 units, arriving at a figure of 62.68, which is the expected earnings of the enterprise. Clearly the information costs and these costs need to be taken from the EMV given that information. From the EMV with information, we need also to subtract the EMV without information, and so we are able to calculate what is called the Expected Value of Additional Information (EVAI) with the following formula:

$$\text{EVAI} = \text{EMV with information} - \text{EMV without information} - \text{cost of information}$$

The information is worth buying only if the EVAI comes out as a positive rather than a negative figure. In this case, it comes out as a strong negative:

Figure 2. Decision Tree of Options, Decisions and EMVs

Predicted regimes	Action of manager	Actual regimes	Joint prob.	Pay-off	EMVs
Regime 1 0.2	Option 3	1 (0.9)	0.18000	80	14.4
		2 (0.0875)	0.01750	60	1.05
		3 (0.0125)	0.00250	40	0.1
Regime 2 0.7	Option 2	1 (0.666)	0.04666	15	0.699
		2 (0.9)	0.63000	120	75.6
		3 (0.0333)	0.02333	60	1.399
Regime 3 0.1	Option 1	1 (0.0222)	0.00222	20	0.044
		2 (0.0777)	0.00777	50	0.388
		3 (0.9)	0.09000	100	9.0
					<u><u>$\Sigma = 102.68$</u></u>

$$\text{EVAI} = 102.68 - 930 - 40 = -867.32$$

The figures derive from the sum of EMVs, the EMV of the "best" option (i.e. option 2) and the initial cost of the information (i.e. 40).

The Value of Information

Having said that, of course, we would need to define and differentiate the type and source of information more finely. An assumption here is made that, as many firms do, information has to be purchased out-house. This is then collated with information already held in-house, which may be considerable. In libraries and information services, moreover, the real comparison to be made is the one between decisions that are made in the absence of a reliable MIS and those that are made with the benefits of one. It may be that the examination of such a cost-benefit trade-off in a library, through the comparison between (hypothetical or actual) decisions made in various states of information, would reveal important climates for decision making. In essence, the particular decision-making situation throws up its own methodology.

For instance, in such a situation, a manager can distinguish the several options, and can project intuitively ahead, so as to imagine how they might perform under different regimes. Such a manager will know, through experience and insight, which regime is most likely: it may be a scenario of retrenchment. Such regimes or scenarios can be represented in hard numerical terms, not just in the enumerative sense (line-item budgets, acquisition figures, issues, staff:stock expenditure ratios), but also in terms of probabilities. Having got to this point, managers may well be impelled to calculate the likelihoods of the particular options working and scenarios appearing, and then calculating what pay-offs will accrue from each. If managers wish to conceptualise the sets of decisions in terms of losses rather than pay-offs, this can be carried out (although the workings are not given here). Last of all, managers want to know what will happen, given various states of knowledge or information; they

assume that perfect knowledge is rare, but may well wish to determine how much it costs to enable information to flow into the system, and then consider, in cost-benefit terms, what changes will be induced on the decision making and its results.

In many ways, the concepts here are relevant to decision making in libraries and information services. The concept of the EMV, for instance, expected monetary value, is one which, if translated into the profitability or ability to avoid loss making of particular cost centres within the organisation, has direct application. An advantage is that managers can devise different alternatives and work them out without inflicting damage on the on-going systems of the library. Only when the various options have been considered, with pay-offs and differential access to information, does the actual process of change need to occur. In this sense, the application of decision matrix approaches, and the probability theory implicit in them, makes good sense for the proactive manager. It is, of course, possible to speculate about other applications to different search options undertaken by users of on-line systems, to cost-benefit/utility models of reference services and individual users using resources, although, in such areas, there are conceptual as well as managerial problems (e.g. in articulating notions of cost and benefit in situations often regarded impressionistically). Nevertheless, concepts like paying for information, cost recovery in document delivery systems, trade-offs between buy and borrow policies, and more prosaic but essential administrative services all lend themselves to this treatment. The versatility and range of quantitative techniques in library and information management are reflected in the bibliography and in current research in the field. At its simplest, the case rests on the proposition that there seems no good reason for good managers to ignore good things. *Au contraire*, try it before you knock it.

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APPENDIX XI

Collaborating over meanings in management :

Drucker looks at effectiveness.

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Collaborating over Meanings in Management: Drucker Looks at Effectiveness

by Stuart Hannabuss, School of Librarianship and Information Studies, Robert Gordon's Institute of Technology, Aberdeen

Introduction

In personal relationships, the clarification and negotiation of meanings is central. We live within a web of language and, by giving things names and through sharing and restructuring knowledge, we communicate with each other. In personnel management in organisations, therefore, the management of meaning lies at the heart of things. Such management entails the ordering and co-ordinating of work done by ourselves and other people, as well as the mastery of complex social and technical patterns of thought and behaviour.

Meaning is embedded in every strategy and statement within the organisation, in the job description which reifies the managerial conception and perception of a work role, in a policy which operationalises key objectives and priorities selected from a context of the perceived reality, and in performance appraisal where, within authority structures and dyadic relationships, roles and intentionalities are negotiated. Effective personnel management exemplifies successful communication, a process made up not just of explicit and objective "public domain" facts and information but also overt and latent value and belief systems, attitudes and prejudices. At the same time, people in organisations use meanings for explanation and command as well as to suggest and explore hidden or half-realised symbolisms and myths. Meaning, then, as revealed in action and interaction, is a crucial interpretative dimension of the personnel manager's role.

Knowledge Paradigms

The work of Kuhn[1], Mannheim[2], Ziman[3] and Gurvitch[4] shows how pervasive are the knowledge paradigms within which particular groups of people work and think. Such paradigms, of course, are made up of informational or cognitive elements (such as what we know, what we know we know, what experts are considered to know, what novices are expected to know) as well as value and belief-laden knowledge. Into this second category come what educational psychologists call affective knowledge (i.e. dealing with the feelings); but research has broadened our conception of this axiological area into a fuller view taking in ideology and symbolism, the pragmatics of discourse, semiotics and non-verbal communication. Ultimately, it is impossible to divide paradigms up like cakes, for the various components interpenetrate.

In personnel management, there is a natural interest in the operation and scope of such paradigms within the organisation (or, at least, interpersonally in group structures). Sociologists and social anthropologists like Burrell and Morgan[5], Harris[6], Willmott[7] and Astley[8] have

illuminated the behaviour of people in such groups through looking at connections between explicit actions and perceived realities, and often there are important outcomes to this, such as a mismatch between the perceived priorities of top management and personnel. Greatest problems lie over central issues like power and roles, tasks and people.

It is difficult to conceptualise problems such as these in terms of hegemonistic meanings, that is, authoritative attributions of meaning to key concepts within the subject domain or activity. Unlike, say, botany or zoology, or even in a thesaural structure of a knowledge database, where the syntactical and semantic relationships between concepts is often highly ordered (e.g. hierarchically, cohyponymically), the central concepts and meanings in the field of management are more consensually negotiated. This is, in part, due to the plain linguistic fact that sociological concepts are eligible to a plurality of hermeneutic approaches (e.g. concepts like "performance", "socialisation", "justice"), and, in part, to the origins of most common and useful meanings within an oral and practitioner-orientated tradition.

This is why Astley[8] correctly speaks of the management "discipline" as "an arena for the interchange of theoretical ideas uncoupled from their base in managerial practice", emphasising the way in which, as if in an arena, meanings get shaped and reformulated through use, rarely stay fixed, and change over time as new combinations of skills and perceptions arise. An example of this, with reference to the concept of "performance", is discussed by Hannabuss[9]. The pragmatic incrementalism of meaning in management, what Knorr-Cetina[10] terms "constructivistic", characterises any area of professional activity where knowledge exchanges incorporate negotiated meanings of this type. At work, simultaneously, are facts and beliefs, knowledge and metaknowledge, factors deriving from the organisational culture.

Organisational Cultures

The researcher is encouraged to see this process holistically, partly because managers themselves have beliefs about the task and business of managing, i.e. they are vigorously metacognitive and self-critical. The beliefs they have about what effective management is[11, 12, 13] and the extent to which their own practice and attitudes conforms to, or diverges from this consensual paradigm (e.g. it might be a predominantly entrepreneurial paradigm), as well as how they themselves think about their own thinking[14], profoundly influence decision making in the office and on the shop floor. Moreover, they live within an organisational culture to which they themselves contribute in no small way. This culture is

one of shared networks of meanings, of agreed methods of doing things (e.g. contractual bondings, tacit concessions to power, coping strategies with conflict, perceptions of valid rewards), meanings which guide scripts of human behaviour[15, 16].

The elements of corporate culture are absorbed and exploited by the initiates[17]. People come to conceptualise about their own promotion or career patterns in the paradigmatic apparatus which they themselves have interiorised[18]. They adopt negotiating ploys impregnated with corporate ideology[19], and, in a word, become socialised organisationally[20]. Even within constituent sub-units (say, the accounting area of the firm), this normative effect of ideology can be seen[21]. Now, this is not to suggest some deterministic effect on managers within the organisation. Nevertheless, active participation in the professional knowledge and belief domain of management equips the protagonist with key concepts and values. These he/she often uses as meta-concepts or meta-values, i.e. concepts or values which in themselves depend on, and define, the concept, or value system, within which they move. So, in management, concepts like "performance", "growth", "success" and "effective" get created, reformulated and applied in meta-strategic ways in problem-solving and decision-making situations. Desirability and approval are vested in ostensibly neutral concepts like "efficiency" because they are not merely objectively perceived aims of the company; they are over-laden and undergirt with complex layers of axiological meaning, which comes to play an essential part in the use of language and meaning between initiates into the mystery of management. These meta-values are so vested and entrenched with overtones of the desirable that "it seems beyond dispute or contention"[22].

In addition to the organisational culture and its powerfully influential effect on meaning, managers draw on mental models of management and human behaviour which tap deep symbolic and mythical elements in the human character. Tales of heroes conquering dragons and capturing treasure are, in tropological terms, not too far remote from tales of success in management. It is easy to characterise the decision-making process in terms of a quest for the right answer, for truth and validity, or simply as a way of avoiding disaster.

Embedded in human interaction are many symbolic ways of interpreting behaviours and outcomes, perhaps in relation to the exercise of authority, the gesture of friendship or confrontation, the proxemic configuration of an interview, the decor for a meeting. All these form overlaying codings in the act of interpretation for the participant, and tap and activate all kinds of public and private knowledge in him. Ethnomethodological approaches, such as Golding's [23] have clarified the connection between such symbolisms and authority structures in organisations, while the work of Peters[24] suggests that symbols can take both highly elusive and abstract forms (like what the senior manager seems to think of acquisition) and very concrete forms, too, such as agenda at meetings, organisational charts, and so on. Connections are made, in fact, between apparently disparate entities, when symbol and metaphor are employed to give things names and explain reality[25]. Such reasoning may be almost purely iconic or associational, and it may be highly idiosyncratic, yet, as it is used by personnel to make sense of things they do and see, and to endow events and decisions with a meaningfulness that ultimately is the only factor to give it true identity for them, this kind of thinking response is a key ingredient in most personnel.

Personnel managers engaged in assessing the range of meanings which staff in a company appear to need and use should look at the full paradigm, the complete arena of concepts and meanings, acknowledging the objectivity and the factuality which people use to make things mean, but also acknowledging the multifarious effects of valuation and belief, symbolism and myth on the use and establishment of meaning. We go back to the notion of negotiated meaning when we argue that, in management, consensual meanings are constructed collaboratively, and this is particularly true of key concepts like "performance" and "effectiveness".

Management of Meaning

Even when such concepts are widely held to be central, and are defined magisterially by key textbooks and gurus in the field, this process of de-construction and reformulation goes on. This is to be expected in a sphere of activity where practitioners interact and establish meanings for things and actions. Managers spend much of their time talking[25], and Gowler and Legge argue that this is the oral tradition out of which much of the rhetoric and semantics of management arise. Management is "a social collectivity whose members share a set of implicit and explicit meanings acquired through innumerable communicative exchanges". Through, and with the help of, these meanings, people in organisations make sense of phenomena such as power, conflict and work. Many of these meanings are intentional, and concern themselves with the technical and social realities of work. Others are implicational and help people to make sense of how values and beliefs define experience[25]. This is a useful taxonomy for explaining the continuum of meaning and meaningfulness which operates in an organisation. It is particularly valuable when researchers seek to analyse central concepts in management.

One of these is why organisations succeed and fail. The aims of the firm lie at the heart of management thinking. They may consist of growth or survival, profit or goodwill. Achieving such aims depends on leadership, which, in turn, depends on the ability to take risks, compete, and get work done through people. This mesh of concepts emerges from talk by managers about managing[26, 27, 28, 29, 30], where effectiveness is defined in conjunction with authority, efficiency, costs, time and orientation towards people. For example, "effective managers manage themselves and the people they work with so that both the organisation and the people profit from their presence"[30]. There is a heavy emphasis on practical knowledge, learned on the job; on axiomatic knowledge, in which key concepts are picked out and illustrated with almost proverb-like simplicity; at all times, an assumption is made that secrets of a mystery can be revealed if only the right verbal formulas can be found. Through meaning, then, comes wisdom and control. In a more theoretical but essentially similar way, the management literature attempts a similar task, picking out essentials of the management activity, encapsulating them in concepts, reflecting relationships in schematic models which serve to characterise the much more complex reality of real life. Contrasts, like that between mere activity and true effectiveness[31, 32, 33], demonstrate how both objective and axiological meanings are mobilised when good management practice is being described.

We gravitate irresistibly towards defining concepts in management. This is not merely an academic activity, for it is part of the continuous negotiation and renegotiation of meaning. It is a tool for defining what the organisation

is for[34], for analysing the sub-systems' interrelationships[35], and for determining commonly agreed meanings about tasks and roles (e.g. in a personnel specification). Analysis of concepts, too, allows us to examine, on a micro-level, the collocation of elements of meaning which lie at the very heart of management thinking, accepting the empirical proviso that they have been exteriorised in the first place (say, in comment, opinion, conversation, surveys, books, reports or policy statements). Often, we find through this that concept analysis reveals the open-text discourse structure which Eco[36] finds in narrative discourse, and the value-laden and symbolic agenda which impregnate so much professional and demotic discourse[37, 38].

Defining Effectiveness

If asked to define a chair, we might draw on semantic memory for an icon/image and/or concept label, and then give enough of its attributes to constitute a definition. Alternatively, we might point to one and tell our interrogator simply to look at it or sit on it. We might, as a third option, consult a dictionary. There, we would expect to find a concise accurate and consensually agreed meaning. Similarly, with words like "daughter", "judge", "civet cat" and "dream". The expectation of both parties is that, ultimately, an *ex cathedra* definition exists. This, as far as the labelling process goes, is an area of inherited rather than negotiated meaning.

However, it is usual in the subject domain of management for major terms to appear and need to be defined *ad hoc*. It is not that such terms have no prior existence or that there is no consensual identity for them. It is simply that each writer needs to establish a zone of workable meaning for him/herself, and the act of reading his/her discussion (say, in a textbook about management) is an act of acceptance of his/her invitation into an area which is as much semantic as managerial, i.e. as much concerned with the linguistic phenomena of meanings as it is with the referent managerial concepts and processes.

Distinguishing information and differentiating it in category form . . . is a central part of all learning

An example of this establishment of workable meaning is to be found in Peter Drucker's book *The Effective Manager*[39]. Early on in the book he concerns himself with the multiplicity of meanings and associations which readers are likely to bring to the notion of effective, manager and effective manager. He needs to establish, first of all, what kind of manager he is talking about, and does this by referring to the "knowledge worker"; such beings are executives, work mostly in organisations, and are expected in the course of their work ("by virtue of their position or their knowledge") to make decisions "that have significant impact on the performance and results of the whole".

He then needs to establish what he means by executive. One of the major challenges he faces lies in the many meanings and images the concept has for people. It might, for example, have overtones of bureaucracy, of activity, of

taking or giving orders. The first step into this arena of meaning, therefore, is one which needs to do two important things: first, it needs to concede the plurality and subjective impressionism of meaning to the readers (although not, of course, overtly), and second, it needs to move through this position to one of its own in which a meaning can be built up that is workable and agreed. The notion of *building up* a meaning is important, since a dogmatic and lexicographic stance on the absolute meanings of a key term is impossible. The impossibility arises for two reasons, first the semantic complexity of the term itself, and, second, the susceptibility which the process of definition has for idiosyncratic meanings.

This approach is very revealing of the semantic exchange which characterises the negotiation of meaning in the social sciences. So many ideological or semantic overtones impregnate major concepts in management, for example, that this form of negotiation or wooing is necessary. It is necessary in order, first, to persuade the readers to accept a given meaning as plausible in context, and, second, to adopt it as their own in the immediate exercise of the interpretation of the text and possibly in the longer term as a functional element in their own personal lexicon.

Drucker, therefore, demonstrates that he knows of the many interpretations readers are likely to bring to the reading encounter. He presents thumb-nail sketches of different types of manager, encapsulating the gallery of alternatives, and, in so doing, making sure that readers feel they have entered a congenial and intelligible thought-world. Managers, he says, may be people with analytical and decision-making skills, or they are able to use power in organisations to get things done. At this point, and only then, is he able and willing to define what he thinks an *effective manager* actually is. Conceding that there is, *tout court*, no "effective personality" (in the sense that, say, there is a chair), he is then able to assert that effective personalities generically, generalisably, have "in common the ability to get the right things done".

The notion of generic or generalisable meaning seems crucial here as a way of describing what Drucker is doing with the central concepts of his argument. For it is an argument in the sense that we are being invited to work *from* and *with* meanings which he, the author, has decided to give us (like a semantic banquet). He is presenting the meanings far less in a detached lexicographic manner than in a propositional manner. The propositional nature of this approach derives partly from the essential ambiguity and negotiability of the key concepts and partly from the broader characteristics and procedures of the rhetoric. For the reader, there is the challenge of meeting and understanding these meanings and propositions.

Of equal interest and relevance must be the factor of generalisability. In the reader's own semantic memory and active cognitive processes, there is a powerful momentum at work categorising and ordering information into knowledge. Distinguishing information and differentiating it in category form (from A and not-A opposites to more complex taxonomies) is a central part of all learning. This process is also going on in the intelligence of the author, and in this case is exteriorised on the page of text. In reading the text and responding to it, therefore, the two sets of categories meet each other and the encounter generates new forms of category arrangement. It is possible that the authoritative statements of the author may overwhelm the arrangements (or concept maps) of the reader for that/those particular

concept(s). On the other hand, the cognitive dissonance set up for the reader may be so great that great difficulty or reluctance to accept and use the *ad hoc* meaning can arise.

We can see here how Drucker has to present the constituent parts of his argument, as well as the argument itself, in propositional and even polemic terms. Each definition, if you like, is acknowledged to have its own mesh of heuristics, *ad hoc* search strategies and requirements as the reader seeks to gain common and productive ground with the otherness of the presented definition.

Negotiated Meanings

"What all these effective executives have in common is the practices that make effective whatever they have and whatever they are." Such practices are the same, he argues, if the effective executive works in business, in a hospital or in a university. From this point, Drucker is able to establish his chosen meaning. This is *not* a meaning that he (or indeed any reader) would or might get out of a dictionary. It is a term unlikely to be found as such in a thesaurus. The reason for this must lie in the idiosyncratic source of the meaning. Yet, paradoxically, such a meaning has magisterial authority. It can be accurate, persuasive, workable, integrable by the reader without any trouble or resistance. In fact, many of the most effective writers are able to *equip readers with appropriate labels for their own concepts*. Such concepts, and the reader's awareness of them, may be inchoate or latent, and the encounter with the new meaning is, like Adam naming the animals, a unique moment when the reader moves from vagueness to precision, from having a feeling to operating a concept in external discourse.

But we cannot expect, at the start, a neat comprehensive definition. Since we have discovered that in this world meanings are negotiable, we have to work at the meaning. At this early point, Drucker has been able to convince us that we are in good hands. This is an important feature in the process, particularly because the likely readership of the text will bring, from their own formal and informal experience, a cluster of meanings, associations and prejudices, which they, consciously or unconsciously, will wish to test out with the author as they proceed through the text[40]; for there is a case to be presented, not merely a few meanings to be exchanged.

We are given an *interim* meaning. "Effectiveness, in other words, is a habit, that is a complex of practices." At the end, he returns to this provisional stage of intent and meaning when he says: "Effectiveness is, after all, not a 'subject', but a self-discipline". With this interim meaning, two things then become possible: the first is that he gives himself the opportunity to develop his argument and provide finer detail, and, second, the reader is given the opportunity to reject the argument, as far as it goes, or to concede the plausibility and usability of the interim definition and, of course, what it appears to promise.

The invitation is given and the gauntlet handed out. We are, to change the metaphor, invited to the ball. We admit to being willing to reformulate our ideas and even our concepts, and yet we feel that we have not been forced to abandon and reject what we already know and think we know about effectiveness. After all, since the word "effective" comes from the domain of common everyday discourse, we could not expect otherwise. And perhaps it is because of this very origin that this process of negotiation is necessary. A comparison might be made between this and other words like it which have both specialised *and* common meanings

(e.g. "significance" in statistics and in common speech), and concepts like "electrolysis" which draw clearly away from the ambit of everyday speech. Further still, we might cite mathematical and musical notation.

We are moved into the next stage of the reading and learning encounter. The author is then able to develop his interim meaning in a fuller, more systematic manner. Following up on his statement that effectiveness is a complex of practices, he then proceeds to describe (and define) these practices. There are five key ones, an interesting piece of categorisation or codification in its own right, structuring knowledge for the reader, and implying not merely that effective management consists of these five key things, but also that a *comprehensive objective meaning of "effectiveness" would comprise or subsume such constituent parts*.

Contribution is the extent to which the executive, effective or not, contributes to the performance of the organisation

Five practices need to be acquired by effective executives. These are (a) knowing how to focus on contribution, (b) knowing where their time goes, (c) building on their strengths, (d) concentrating on a few areas where superior performance matters most, and (e) making effective decisions. It is then possible to move to each of these for full discussion, and in fact the rest of the book is structured around these five elements.

Clusters and Collaboration

Contribution is the extent to which the executive, effective or not, contributes to the performance of the organisation. Drucker regards it as a key to effectiveness for a manager. It is about how a manager uses and views his/her efforts, and how he/she concentrates on results. It turns the executive's attention from his/her own concerns to the outside where he/she has results. He/she starts asking questions about these results, from others in the company and outside. It is valuable to notice here how *incremental* the meaning is: the author builds up the concept by subtle rhetorical stages, expanding his original idea, broadening it out. In doing this, he *handles clusters of concepts*, e.g. here the reader is compelled to handle "performance" alongside "effectiveness"; one concept is defined obliquely, though tangibly, in terms of another. There is no facile equation of one with another. Each is introduced as a valuable element in the map of concepts that go to make up "effectiveness" and, beyond that, "effective management" itself.

Another feature is of interest: that of *collusive or collaborative meaning*. In this, in the rhetoric of his exposition, the author not only introduces the reader to a nest of consensual attitudes and beliefs. Here, as in the literature of many practitioner-based subjects, he makes assumptions that managers will wish to be effective, that the aim of the manager is indeed performance, and that getting results in terms of profits or satisfied customers is the objective of management, or at least among the most typical

and admirable. There is thus, in addition to the plain semantic interpretation, a *moral agenda* at work in the text, which is not only plain to see, but which readers, if they have got this far, are willing to accept as part of the mixedly intellectual and affective framework of the subject.

It is then possible to build up more elaborate meaning structures. Being effective, for instance, involves developing your strengths. "To focus on strength is to make demands for performance". Such interrelationships of concepts are not merely propositional; they begin to form the *essential semantic matrix* of the concepts the reader is seeking to frame, grasp and co-ordinate.

As well as essential relationships of the kind we can detect between "effectiveness", "strength" and "performance", there are *satellite meanings*. These may be drawn from common language, such as when Drucker talks about weakness in the organisation, and how effective management "neutralises" such weakness. We are now working with a re-designated "weakness", not the weakness that we might associationally think of in common language, but a form of weakness only embodied, within organisations, in such activities as *ineffective* management. Similarly, "limitations" is a concept used in this way, as are phrases like "managers being blind to..." and "being aware of limitations".

Since the text deals with negotiated meanings, and because it also deals with values and beliefs (the moral agenda), satellites may also take the form of anecdotes. These are satellites in narrative form that illustrate the concept. They are intended to exemplify the concept in parable form, and such a form is one in which arguably most readers would be willing imaginatively to share. Much managerial experience, moreover, is acquired and conceptualised in narrative or experiential form[41, 42]; so the notion of satellite meanings in narrative form like this is very logical and likely to enhance the power and effectiveness of the text.

Having *essential meanings*, with relationships of an "X is Y" type, suggests that, since we are on polemic ground, there may be "X is not Y" types as well. This is borne out in the structured arguments, and it is possible to characterise these in appropriate linguistic terms. For example, talking about effectiveness where personnel planning is concerned, a contrast is made by the author between "placing a man" and "filling a job". This is a central contrast in personnel management, where a choice has often to be made between unsentimentally filling a job or considering personal factors and possibly making special exceptions. Drucker's contention is that the effective manager unfailingly takes the first course of action, i.e. filling a job. To take the other course is to be ineffective. In this way, he is stating clearly that they are mutually exclusive courses of action and that, in order to define effectiveness (and *a fortiori* to be effective), that should be the reader's course of action too. The implied reader is, of course, a manager set on being effective. Such people are most likely to be reading the text. In this way, then, we can see that the meaning of effectiveness is being built up out of essential meanings, of the *is* and *is not* type, of satellite meanings, semantic and anecdotal, and of moral agendas.

At this stage, the reader is beginning to face a series of sets of alternatives, some overt and some implicit, about what effectiveness actually is. We find that effective executives lead from strength in their work; they are concerned with limitations; they "feed opportunities and starve problems".

In all these, we find "X is Y" and "X is not Y" dichotomies, and through and with these we are encouraged

to structure our thought and shape our response. We are given, then, *incremental meaning in polemic form*, as a form of *collaborative meaning* emerges. This can be seen, for example, when Drucker is talking about the way effective executives use their time. He argues that such people know that they have to get many things done and done effectively. "Therefore, they concentrate — their own time and energy as well as that of their organisation — on doing one thing at a time, and on doing first things first." This statement is not just a definition with its implied opposite: *it is a moral statement in which the author expects the reader to share*.

The moral agenda is very clear, too, when he speaks about how much time and energy managers are keen to invest in projects which enhance their own reputations rather than that of the organisation which they serve. He calls this "investment in managerial ego" and continues:

... unless they are pruned, and pruned ruthlessly, they drain the life blood from an organisation. It is always the most capable people who are wasted in the futile attempt to obtain for the investment of managerial ego the success it "deserves".

By this stage, the different strands of objective semantic meaning, and that meaning which is impregnated with moral agenda, are difficult to disentangle. But that is not the way in which they should be seen; since we live and move in a web of language, and arguably language *is* the reality within which managers, like the rest of us, exist, it is logical to argue that the major concepts of management cannot be used, in their fullest meaning, without their axiological connotations and empirical usages. They cannot be disembodied from their practical context, because that is where they have acquired their significance and that is where, in the mouths and decisions of managers, they will go on living and changing.

Conclusions

Looking at the central elements of meaning in a work like this, we can see, then, that we encounter negotiated meanings, many of them generalisable and interim, and that the move to comprehensive meaning entails collusion or collaboration and the integration of moral agenda. Also at work are essential meanings of the *is* and *is not* type, satellite meanings of the semantic and anecdotal type, and an incrementalism and collaborative activity without which effective communication and agreement would not be possible. By that token, of course, disagreement is equally possible. For these reasons, it is impossible to claim that effectiveness is like a chair; it has got far more legs, and many of them cannot be seen and may not even be there (yet), unless we both agree, or even perhaps if we do not.

Within organisational cultures and knowledge paradigms, both substantive knowledge and processual (or procedural) knowledge abound, and part of the processual knowledge lies in the acceptance of negotiated meanings of the kind we have been exploring. Personnel managers, like all managers, share in this domain of consensual meanings and procedures, and understand the art of being effective if they know what they know, and look hard at what they think, about what they are themselves as effective managers.

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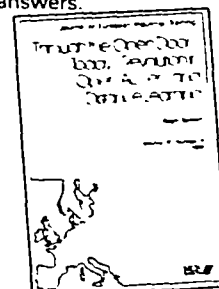
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APPENDIX XII

Personality and management thinking

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PERSONALITY AND MANAGEMENT THINKING

by

Stuart Hannabuss

The practice and process of management tends to be associated with people of drive and enterprise. Typical of this attitude is Victor Kiam's adage that entrepreneurs are people who believe that there is little difference between an obstacle and an opportunity, and are able to turn both to their advantage. Management is also associated with rationality: objective mastery of the facts and logical use of means to declared aims, even at the expense of other people's feelings. Stereotypes like this fix themselves in the mythology of the day, and, since there is no smoke without fire, have some basis in truth.

Tales of Lee Iacocca, who turned Chrysler around, and Victor Kiam, whose *Going for It! How to Succeed as an Entrepreneur*[1] is a manifesto for those who want to make it, underwrite the identikit picture of the successful manager, self-determining, supremely individualistic, with an eye for the main chance. According to Charles Garfield, whose *Peak Performers: the New Heroes in Business*[2] celebrates and memorialises the qualities of management most likely to succeed, the key attributes for a successful manager to have are a sense of mission, real and achievable goals, good self-management, and an ability to build teams and adapt to change. At its heart lies a knack of seeing the critical path, the way to the target, "seeing when, where, and how to move up".

Clearly, here are exemplars to follow, models to imitate. Indeed, although managers are reputed to be people of action, the popularity

of management biographies and "how to do it" suggest that they also find time to read about other managers. Managers tend to be empiricists, and like to exchange ideas and techniques, deal with the thrust and flow of decisions in a busy working arena, and by that token perhaps it is natural for them to be curious about each other. It may be a socialised form of managerial gossip to read Michael Edwardes's or John Harvey-Jones's accounts of their life and times. It is also an invaluable way of taking lids off people's heads and seeing how they tick, if there are secrets worth learning and using.

The Idea of Rational Management

There is an impatience with management theory, partly because many managers regarded it as an early stage in their own professional development, and partly because much of it still insists on being rationalistic. Throughout the 1940s and 1950s, in management textbooks, particularly from America, the rationalistic paradigm or world-view of management prevailed. It regarded management as rational in that managers objectively selected alternative courses of action based on the facts, and the aim was to maximise output and profitability. Frameworks of authority, often hierarchical, were the natural settings for efficient and effective organisational behaviour. There were reasons for this view, lying in the historical evolution of nineteenth-century industry and the Taylorian picture of man as motivated economically to

work, and in the use of positivistic scientific assumptions (about experimentation and explanation) about how human beings find things out and create things.

What is of interest here is the common acceptance of the rationalistic model in much management thinking and teaching throughout the twentieth century. Managers make rational decisions, work in proactive control loops from which feedback reliably comes, communication upward and downward, span of control, and the use of queueing theory to assess pressure points. Such factors are still implied in many books about successful management, and need to be in the sense that precision over the profit and loss account and the tolerances allowable in quality control are essential for sound budgeting and production. Critics of this view asked where values came into the model. Herbert Simon[3] in his *Administrative Behavior*, published in 1945, asks whether rational decisions are based on values as well as facts. Looking at ethical values, for instance, he suggests that, when we say "good" and "bad", these are not purely ethical: "procedures are termed good when they are conducive to the attainment of specified objectives, and bad when they are not. That they are, or are not, so conducive is purely a matter of fact, and it is this factual element which makes up the real substance of an administrative science". He goes on to typify the rational approach, this time to profit: "So 'alternative A is good' means either 'alternative A will lead to maximum profit' or 'To maximise profit is good'". Throughout the book, he has stressed how decisions do draw on values as well as fact, but we can see that his fundamental critical stance is economic and rationalistic. He suggests that organisations cope with a world of confusion and order it in controlled ways to determined ends.

Search for Excellence

Objections to thorough-going rationalism have taken on a new lease of life in Britain in recent years with the introduction of new practices into the health care services and education. Performance measures and personnel appraisal have been two particularly acute issues. Part of the case against rationalism, as it seems characterised by a preoccupation with costs, has been the loss in terms of values. In mainstream management, this paradigm shift has been taking place with the "excellence" movement precipitated by Peters and Waterman's *In Search of Excellence*[4]. They

looked at some of America's best-run companies and claimed that they were effective because they put *shared values* at the very centre. Quality management should be based, they said, on new styles of openness and tolerance, acceptance of the "strengths, weaknesses, limitations, contradictions, irrationalities" of organisational life. People needed meaning, positive reinforcement, and needed to think of themselves as winners. Rigid complex systems defeat such ends. Top managers are good listeners and do not treat workers like children. The emphasis, then, is on the *belief structure* within the organisation, orientated towards a realistic mission and the customer rather than just technology and cost. John Harvey-Jones, in his *Making It Happen*[5] speaks about giving staff headroom to act and grow: "the individual, not the company, is the key to success, and the company flourishes if it gives people room over their heads, the freedom to be honest about what needs to be done, and scope to participate in decision-making". That kind of excellence is, he claims, the one which makes things happen.

Managerial Roles

Managers are there to get things done. Effective executives get the right things done, as Peter Drucker says in *The Effective Executive*[6]. He or she contributes in key areas of performance like results, building people and values, gets priorities correct and makes sound decisions. Now advice like this is popular in books on management, and, like many truisms, are truths deep down. Many writers like to encapsulate management wisdom in concise and aphoristic ways. One reason for this is that readers are generally busy. Another is that they bring many of their own views to bear, critically and sceptically, when reading management materials, and "negotiate" the ultimate meaning and application of the text rather than read in a state of accepting credulity.

Mintzberg's three major roles for managers have been memorable and influential. In *The Nature of Managerial Work*[7] he suggests that managers have *interpersonal roles* which are symbolic when they are figureheads, power-based and charismatic when they are leaders, and enabling when they encourage the growth of webs of relationships within the organisation. Then there are *informational roles* which concern themselves with receiving and transmitting information, dealing with and analysing it, disseminating it (say, to

subordinates), and using it to make plans and identify problems. Finally, there are the *decisional roles*, solving problems, allocating resources, initiating and acting entrepreneurially, and negotiating (meetings, demands of two groups).

Management and Personality

For each of these, different roles and facets of personality are required. Some are outgoing and extravert, while others are inward-looking and need careful deliberation for carrying out. Some tasks need analysis and systematic investigation, while others need brain-storming and thinking in whole schemes. Different kinds of managerial activity, then, emphasise the need for different personal traits and thinking styles. We shall look at thinking styles later.

Peters and Waterman[4] cite Harold Leavitt's classification of managers into pathfinders, decision-makers, and implementers. Pathfinders want to put their personal stamp on to a business, tend to be entrepreneurs, and are often artistic, he suggests. Decision-makers, on the other hand, like to work with practical realities and facts and figures, and often end up, in organisations, in appointments like systems analysts and statisticians. At the other end of the spectrum there are the implementers, who "get their kick from working with other people", and gravitate to posts like salesmen and social workers, psychologists and teachers. There are many such classifications. Another is the division between managers who are consolidators and innovators. Consolidators ask such questions as "what resources do I control?" and "how can I minimise the impact of others on my ability to perform?", while innovators ask "where is the opportunity, and how do I capitalise on it?"

It is clear that managers are not one of these all the time, because different challenges bring out different aspects of personality and different skills. Nevertheless, just as, believe it or not, you are a Pisces or a Gemini, so it may be argued that, whatever changes circumstances induce in you, there is a central tendency for you to behave or perform in particular predictable ways for certain tasks. For instance, your general method of attack for a problem might be to analyse all the component parts and then come to a reasonable decision. On the other hand, you might prefer to take an overview first, and only then, once you know all the facts, come to a decision. These are radically different methods of problem-solving,

and, though neither is better, each might be more suitable than the other for particular tasks. In the same way, some forms of reading are better carried out in a systematic, serialistic way (e.g. reading problems or detailed and complex information or causal reasoning), while for other forms a holistic approach is best because overall impressions and broad structures are essential for proper and effective understanding of the meaning.

THE RANGE OF MANAGERIAL ROLES CAN READILY BE RECOGNISED IN PRACTICE: ... OPPORTUNISTS, SUBORDINATES, MISSIONARIES AND HERMITS

So when we say that managers might conform to particular character types, this is not to deny the complex ways in which, with different tasks, managers use different facets of their personality and ability. Nevertheless, the range of managerial roles can readily be recognised in practice. One pinpoints managers who are opportunists, subordinates, missionaries, and hermits. Another suggests that managers may be divided into the metamorphic (who are ambitious and energetic, risk-taking and involved in the organisation), the incremental (who develop step by step along a given channel), the tangential (who exist in creative tension in their organisations, resist bureaucracy, and like to be peripheral at the boundaries), and the humanistic (who tend to enjoy life in the round, and resist promotion when it threatens their lifestyle). Whether we call them pathfinders or opportunists or tangentials, such characterologies take us no small way into giving a well-phenomenon in management some helpful means of expression.

For centuries, people have been fascinated by character types. The Elizabethan view that people were choleric or sanguine, phlegmatic or melancholic is well-known from Shakespeare. Hamlet and Malvolio are notorious melancholics. The implicit links between character type and larger affairs of the universe, like the nature of matter, reveal it as part of a more embracing world-view. In the same way, Charles Handy, in his study of the *Gods of Management*[8], suggests that management fits culturally into four aspects associated with the Greek Gods (who themselves merely represent human characteristics). He adapts Zeus as

typifying the paternalistic manager, feared and respected, charismatic and at times arbitrary: in such managerial cultures, Handy argues, like-minded people work as a club, "working on empathetic initiative with personal contact rather than formal liaison". Then there is Apollo, the god of reason: the Apollonian managerial culture emphasises order and hierarchy, and managers work for stability and predictability. Athena, a wise warrior-goddess, represents a task-centred culture, in which talented individuals choose to contribute to getting particular creative tasks achieved. And then there is the Dionysian style of management, emphatically individualistic almost to the point of being hostile to organisational structures, and where democratic decision making is common. Typically, a university, Handy suggests.

...IT WOULD BE EASY, AND WRONG,
TO...IMPLY A POLARISATION
BETWEEN SCIENTIFIC METHOD ON
THE ONE HAND AND INTUITIVE
EXPERIENTIALISM ON THE OTHER

Getting insights into your own personality is a popular sport. Works like *Know Your Own Personality* by Hans Eysenck and Glenn Wilson[9] invite the reader to examine him or herself on scales like emotional stability and tough-mindedness. Essentially, they build on the ancient theory of the humours (choleric, sanguine, and so on), conceptualising human personality in terms of positions on two axes, introversion-extraversion and stable-unstable. So, introverts can be quiet and pessimistic and moody if they are unstable, but thoughtful and reliable and calm if they are stable. Similarly, extraverts can be touchy and aggressive and impulsive if they are unstable, and sociable, responsive, and lively if they are stable. These are the melancholic, phlegmatic, choleric, and sanguine temperaments respectively. Ways will be found of harnessing these ideas to management but, before that, we need to say something about management thinking.

Thinking Styles

Earlier, we looked at the view of management as a rational activity, and suggested some of the limitations of rationalistic approach. But on that account, it would be easy, and wrong, to fall into a simplistic trap and imply a polarisation between scientific method on the

one hand and intuitive experientialism on the other. Much management activity requires the combination of both. In fact, Daniel Isenberg[10] suggests that "the higher you go in the company, the more important it is that you combine intuition and rationality, act while thinking, and see problems as interrelated". Many marketing decisions, for instance, rely as much on meticulous costing and pricing estimates as on intuitions about the brand or company image in target market areas. Many effective performance measures need, once they have built in all the necessary facts and figures, proper interpretation and context.

The usual distinction to make, in speaking about managerial thinking styles (or cognitive styles, as they are also called), is that between the *analytical or rational* and the *synthetic* (i.e. able to bring things together in wholes) *or holistic*. Of course, there is no suggestion that the second is *irrational*, nor that one is necessarily better than the other, even though this might be said in particular situations. John Adair has written clearly on this matter, in *Management Decision Making*[11] and *Training for Decisions*[12]. Analysers, he says, are people who look systematically at what makes things up, at causes and effects, and try to infer principles and causes. Much scientific research is carried out this way. This form of thinking plays a valuable role in problem-solving in management, for it tries to reason things through logically. Such qualities are said to typify "the rational manager". On the other hand, the manager who depends on synthesis thinks in wholes (holistically), sees the wood rather than the individual trees, and likes to think of problems in the full context of their ambiguities and with reference to a range of possible alternative solutions. Adair suggests that there is a third thinking style, in which values, emotions, and an intuitive instinct for the truth are at work. Many feel that this may be more active with holistic than with analytical thinkers.

It is common to associate analytical and holistic thinking with types of convergence and divergence. Convergents and divergents approach problems and learning experiences in different ways. Convergents are traditionally attributed with an ability to analyse, to devise hypotheses and test them out deductively, unemotionally to focus upon problems, and things rather than people. Divergents on the other hand rely upon imagination far more, like to think of alternative ways to do things and alternative roles for things, think holistically and are more interested

in culture. In other words, a conventional science-arts dichotomy of the kind all of us know. Once again, such a scheme does not preclude intermediate or flexible thinking types or styles, but assumes that there is a tendency for particular thinking styles to recur, say, when the learner encounters new information.

**UNLESS INVESTIGATION INTO
PERSONALITY AND COGNITIVE
STYLE IS TO BE MORE THAN A
GAME, IT IS ESSENTIAL TO SEE IT
FOR WHAT IT IS**

This in turn may be linked with another widespread theory of management thinking, that managers are either assimilators or accommodators. Assimilators are ideas people, preferring theories and models, good at assimilating a wide range of material into an integrated explanation. Such people typically go in for pure science and mathematics, and are found in research and planning departments. Accommodators prefer to do things, get the feet wet, take risks, solve problems by trial and error. They tend to like dealing with the actual problem rather than reading a lot about it first. It is possible to integrate convergers-divergers with assimilators-accommodators, and suggest not only that accommodators are likely to be convergent and assimilators divergent, but also that combinations of qualities and traits might suit particular personnel to particular posts. For instance, people with a natural flair for dealing with actual concrete problems, and who investigate things by systematic diligent reasoning, are likely to be tolerant of, and perhaps good at, tasks like computer programming and production. Ability to brainstorm ideas, spot unlikely alternatives, deal openly with a diversity of opinions, may lead a person into areas like market research, selling and promotion.

Thinking Styles in Management

Unless investigation into personality and cognitive style is to be more than a game, it is essential to see it for what it is. On a general level, such work demonstrates how much managers can read about managers, and how common this in fact is. There is a continuing fascination with ways to success, techniques for adaptation, and the establishment of core meanings of what managers are about. More

detailed is the view that such work gives us an insight into some of the central and recurring tasks of management, particularly problem-solving and interpersonal skills, and what are our and other people's strengths and weaknesses. These are not just what are revealed in patterns of attendance and work, but what lie under the surface, feeding motivation, enabling or blocking learning, and explaining role ambiguity and conflict in the workplace.

More than that, such knowledge illuminates the person-post match. Getting this match right is difficult, despite the battery of interview and assessment techniques available. It is possible to add to these not merely our informal knowledge of personality type and cognitive style, but to translate these into formal techniques available in training and appraisal. To do this, we need to go back to the various roles managers play and the diversity of situations in which they work. To what extent, we may ask, does a person carry out a task well because of personality, assuming it is possible to split this off from prior experience and qualifications and so on. Or because of cognitive style? There are tests and questionnaires which can be carried out, sensitively and confidentially, by external consultants, to this end. One used widely is that based on Myers-Briggs character types. A series of tests can reveal a great deal about the way in which people think, and this is valuable for middle managers facing promotion from specialised appointments to general management, and also, increasingly, for middlescent managers in need of retraining and remotivating. Such tests, then, are important aids for organisational and self development in management.

**THINKING TENDS TO BE
IMPERSONAL AND PREDICT
LOGICAL RESULTS, WHILE FEELING
CONCERNS ITSELF WITH BELIEFS
AND EMOTIONS**

Isabel Briggs Myers in *Introduction to Type*^[13], explains the principles on which the system works. There are, she says, "valuable differences in people that result from the way they like to perceive and the way they like to judge". There are different ways of finding out (sensing and intuition), and different ways of deciding (thinking and feeling). Sensing is useful for gathering facts, intuition for eliciting meaning.

Thinking tends to be impersonal and predict logical results, while feeling concerns itself with beliefs and emotions. By extending this, we can say that people fall into various groups or types:

- (1) *sensing and thinking*: such people prefer facts and handle them impersonally. They are matter-of-fact and move into posts like production and applied science.
- (2) *sensing and feeling*: such people prefer facts too, but make their decisions with personal warmth. They are sympathetic and practical, and are good at selling, nursing and teaching.
- (3) *intuition and feeling*: such people prefer possibilities and handle them with personal warmth. They are enthusiastic and full of insight, and gravitate towards teaching and the arts.
- (4) *intuition and thinking*: such people prefer possibilities and handle them impersonally and analytically. They are logical and like working in the sciences, research, and analytical areas of management.

Each of these is given a code abbreviation, so that they are, respectively, ST, SF, NF, and NT (N for intuition to keep it distinct from I which means introvert). We may now add to these whether they are extraverts or introverts, notions which derive from Jung's study of psychological types (this yields us with the letter E and I). Finally, we need to add one last dimension, one covering how people regard the world. This can be judgemental, in which case they are concerned to organise experience and come to a decision, and dislike ambiguities, or it can be perceptive, in which case they prefer an intuitive approach to the world, "wanting to understand life and adapt to it". The letters for this dimension are J and P.

...THE TESTS DETERMINE THE
KIND OF MANAGER YOU
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With these, we can now construct the permutations of the character-thinking types. For instance, extraverted thinkers, who like organising facts and reaching objectives on schedule, may look at things with their sensing rather than their intuition; since they will be

judgemental, they can be coded as ESTJ. Greater use of intuition in such a type would turn them into ENTJ. Then again, introverted sensing types, with a rich inner life, may use thinking (ISTJ) or feeling (ISFJ). There are some twenty types. They are all very lifelike, and the ways in which the tests determine what kind of manager you are are reliable and do not insult the intelligence or seem manipulative or invasive.

IDEALLY, PROBLEM SOLVING WILL INCORPORATE AN AWARENESS OF HOW THINKING IS TAKING PLACE

More than that, they can be investigated independently by any personnel manager, or a manager on his own behalf, and adaptations can be used with specific relevance to situations and problems in the company. They can, too, be scaled down and used in training sessions as part of the explicit or implicit agenda in case studies and in-tray exercises. Finally, they can be applied by the manager on an ongoing basis to his own programme of work, as an insight into his own ways of handling problems. Ideally, problem-solving will incorporate an awareness of how thinking is taking place. There are two clear uses for the findings of such work: first, in getting the match between post and post-holder more nearly correct, and second, in getting the mix of skills and personality traits more nearly right in any particular work setting. Susan Vinnicombe[14] and Keirse and Bates[15] all suggest how this might be achieved. If we consider types of leader in a company, we may find that there are:

- (1) *traditionalists* (who like sensing and judging, who are strong on common sense and procedures but weak on handling change).
- (2) *catalysts* (who like intuition and feeling, who are strong on charisma and working with people but weak in seeking others' approval and avoiding unpleasantness).
- (3) *visionaries* (who like intuition and thinking, who are strong intellectually and like solving problems but insensitive to other people and may feel restless and unfulfilled).
- (4) *trouble shooters/negotiators* (who like to be practical, welcome change and know what's going on, but avoid abstractions and fail to see the large and long-term).

It is crucial to take these factors into account, and, in Vinnicombe's research, to add to the variety of factors like extraverts and introverts, convergents and divergents, analysts and holists, the important extra dimension of gender.

Thinking and Training

A major intention of training is to encourage change through learning — learning new skills and information, or new things about yourself. It is induced and facilitated learning, and costs the organisation large amounts of time and money, and so needs to be a sound investment.

IT IS POSSIBLE TO IMPROVE A COMPANY'S KNOWLEDGE OF ITS OWN MIND AND WAY OF THINKING AND LEARNING

People learn in many ways, as we recall from school. It might be motivated through fear or by promise of rewards. We might like the subject, feel that the qualification is worth acquiring, or the teacher worthy of affection. Writers like Gagne[16], Entwistle[17] and Rowntree[18] have described the ways in which people actually do learn, and managers involved in training, or self-development, can translate what they say very readily into the domain of practical management education. Depending on the text and the task, the learning style might be serialist, which is step-by-step, systematic. This may arise, of course, as much from the nature of the information (e.g. tightly reasoned or complex) as from the learning style, but such a style typifies the convergent, analytical thinking style, and suits itself pre-eminently to work like accounting and scientific investigation.

On the other hand, the holistic learning style thinks more in wholes, gestalts as psychologists say, wanting an overview of the information and highly tolerant of ambiguities and alternative approaches. There again, there may be a surface learning style, typified by skimming and scanning, valuable in itself and not less than, merely different from, the business of deep learning. This, once again, may arise from the approach of the learner or may be enjoined upon him by the nature of the learning materials. The four key factors — *serialist, holistic, surface, and deep* — are easy to remember and integrate into learning experiences on training programmes.

One very useful way of analysing learning styles is to draw on the work of Peter Honey and Alan Mumford[19, 20]. Using a simple scheme of four types of learners, they recommend that (a) managers determine where they or their trainees stand where learning is concerned and (b) carry out exercises to improve areas known to be weak. There are four types:

- (1) *activists* (who like immediate experiences and fire-fighting, and in consequence prefer competitive teamwork tasks and role-playing exercises, having a go and generating ideas).
- (2) *reflectors* (who like to collect data and analyse it before coming to any conclusions, standing back assimilating before commenting on something, prepared to absorb information and reports).
- (3) *theorists* (who are keen on assumptions, theories and models, like to explore associations between ideas, and take part in complex situations).
- (4) *pragmatists* (who like to search out new ideas and experiment with applications, to implement what has just been learned, and who get confused if there are few guidelines for a task).

For each of these, there are ways of learning to extend learning, and building up strengths. For instance, you may wish to consider improving your activist score by asking yourself how often you throw caution to the winds, what your attitude to rules is, or if you get bored with methodical tasks. Improving your various styles is, of course, designed for people who are prepared to face up honestly to areas where they know they are weak, or where they are prepared to acknowledge the fact to other people in the company. Yet, in training and appraisal, the detection of such strengths and weaknesses is essential if the broader challenges of staff development are to be achieved. Ideally, managers should motivate themselves to undertake such self-examination. Without pressing the analogy too far, they are rather like the spiritual exercises of the religious orders or like physical fitness, a commitment to change and symptomatic of the value and belief systems in the organisation.

Conclusion

Richard Branson of Virgin was recently said to read biographies of successful people in his spare time. It has endearing overtones of the

Samuel Smiles self-help tradition, but, more seriously, it suggests that managers really do like to read about managers. Management might appear to be a rational process but in fact it is as much of an art as a science. This can be seen, if not in individual managers, then in the skills base which can be found in successful companies. At the heart of this lies a productive match between people and people and people and jobs. Underlying that, in its turn, lies a part-hidden domain of personality and thinking style. Analysis and intuition, accommodation and assimilation, judgement and perception: whatever the component factors are called, they are noticeably at work. Through use of these criteria and a range of simple exercises and self-tests, it is possible to improve a company's knowledge of its own mind and way of thinking and learning. These are particularly valuable factors to build into any effective training programme.

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Stuart Hannabuss is a Chartered Secretary and a Chartered Librarian. He teaches management at the School of Librarianship and Information Studies, Robert Gordon's Institute of Technology, Aberdeen. He holds degrees from Oxford, London, and Aberdeen Universities, and has published over two hundred articles and short stories, and the book *Knowledge Management* (MCB University Press, 1987). His current research in management is on cognitive styles.

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- (1) General
- (2) Concepts and Concept Analysis
- (3) Propositions, Axioms, and Rules
- (4) Scripts and Stories
- (5) Myth and Metaphor

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